


TOWN OF VIENNA  
TOWN COUNCIL WORKSESSION MEETING  
Monday, December 12, 2011  
8:00 PM  
Charles A. Robinson, Jr. Town Hall, 127 Center Street South

 Print

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1. **Including Special Pickups within Weekly Trash & Recycling Collection**
2. **Public Private Education Act Guidelines (PPEA)**
3. **RFP for Maple Avenue Commercial Corridor Zoning Code Update**
4. **Capital Improvements Plan Update: Projects and Financing**
5. **Known Drainage Problems & Flooding Areas**

TOWN OF VIENNA  
TOWN COUNCIL WORKSESSION ITEM  
December 12, 2011  
8:00 PM

 Print

ITEM NO. 1

Including Special Pickups within Weekly Trash & Recycling  
Collection

### BACKGROUND SUMMARY:

The attached report proposes reassigning two Equipment Operator positions and their trucks to the Sanitation Division. Residential trash, recycling, metal, furniture, bulky items, brush and other non-commercial refuse would then be collected from every home each week. Language in Town Code should be clarified and a Sanitation Inspector position added to gather evidence and prosecute contractors abusing the system.

### OVERVIEW:

**Background:** DPW has been asked to review the current Trash, Recycling and Special Pickup programs and see if there is a way to streamline these services. Currently Sanitation Division crews collect waste from Vienna households on a split-week schedule. Household garbage and yard waste is picked up one day per week. Single stream recycling and brush (bundled or loose in a trashcan) is collected on another day. See Map #1.

Bulky items like furniture, mattresses, metal items, loose tree limbs, large brush and homeowner-generated construction debris are collected by the Street Maintenance Division through the Special Pickup Program. Residents can call to order a Special Pickup from February 1 to October 1 yearly. Two collections are free; residents may purchase extra Special Pickups at a rate of \$75 for household debris and \$25 for brush. Pickups are collected within 10 business days.

After major weather events, like the recent hurricane, the Town sometimes provides another free, unscheduled Special Pickup for brush and limbs.

Town Code §13: Refuse Storage, Collection and Disposal contains some rules for properly preparing material for collection but does not prohibit construction debris. A \$100 misdemeanor criminal penalty is provided for violations of the chapter.

### Issues with the current program:

- Rules for refuse, recycling and special pickup collection are overly complex and confusing to citizens.
- The Sanitation crews are disconnected from the Special Pickup Program. Items that could be collected in the trash truck every week are left for special pickup.
- Leaving piles for up to ten days looks ugly and sits so long others are encouraged to add debris.
- Typical piles have a mix of materials which must be separated and taken to 4 different disposal sites. Consequently, a minimum of 4 big dump trucks and a front-end loader are brought to each pile, which is very inefficient.
- Contractors understand Vienna "picks up anything" a homeowner sets out. Contractors provide a discount if the homeowner requests a special pickup to dispose of construction waste.
- Because there is no enforcement mechanism, contractor and resident dumping and abuse of the solid waste regulation is constant. The only corrective action is for the Town to collect whatever is on the street, encouraging more dumping.
- Organizationally, the Town asphalt crew stops their normal work and collect Special Pickups. The number of collections has grown to a point that the asphalt crew spends the majority of their time on the activity and cannot meet their asphalt production goals.
- A large knuckle-boom truck is used to efficiently collect unbundled brush and limbs; however the operator works with the asphalt crew. Therefore the truck is parked most days.

**Proposal - Add extra resources to Sanitation and everything can be collected each week. Full weekly collection will eliminate the large piles of junk from growing.**

- Reassign 2 Equipment Operator positions along with the knuckle-boom truck and a tandem dump truck from the Asphalt Division to the Sanitation Division.
- Collect everything (trash, recycling, brush and special pickups) in 1/5 of the Town each weekday. Re-draw collection areas accordingly. See Map #2.
- Modify Town Code §13: Refuse Storage, Collection and Disposal to:

1. Specifically prohibit anyone except the property resident or owner to set out material for collection by Town crews

2. Only allow material to be placed in public right-of-way on the day of scheduled collection and the ~~item # 1~~ **item # 1** before collection, and

3. Add the assumption that material set out for collection belongs to the adjacent property owner or resident

- Add a Sanitation Inspector position that would monitor material placed in the public right-of-way, monitor contractor dumping, collect evidence and enforce Chapter 13 of the Town Code. The Inspector will use issued building permits to help reduce contractor abuse of the collection program.

**How it will work each weekday in 1/5 of the Town:**

- Two refuse packer trucks will collect household trash in the current fashion. In addition, the refuse crew will also throw in the truck non-metal furniture, lumber, fencing, rugs, homeowner handyman debris and anything else the Fairfax County I-66 Transfer Station will accept. Homeowners will not have to store material and call for a Special Pickup.
- Two refuse packer trucks will collect single-stream recycling including large materials that can be recycled like appliance boxes. The crews will collect any other materials that can be recycled at the Waste Management Recycling Station in Merrifield.
- The knuckle-boom and tandem truck will collect all loose brush and limbs, yard waste and other material which can be recycled at the Fairfax County I-66 Transfer Station.
- The Sanitation Inspector will collect any metal set out for collection since the volume is only 12 tons annually.

**SUMMARY/STAFF IMPRESSIONS:**

- Reassigning two internal staff and two trucks is cost-neutral.
- Even with fewer workers the asphalt crew production will increase because the whole crew is not diverted to Special Pickup collection.
- Weekly pickup of everything should prevent large, time-consuming Special Pickup piles. Large piles usually contain a mix of trash, brush and recycling requiring crews to separate on site.
- Creating an inspection position to monitor material set out for collection and crosscheck against Fairfax County building permits will finally provide a way to control contractor abuse.

**DOCUMENTS ATTACHED:**

1. [trash\\_maps.pdf](#)
2. [ATTACHMENT 3.doc](#)
3. [ATTACHMENT 4 - Contractor\\_debris.doc](#)
4. [Dumps and Landfills 10-21-2011.doc](#)
5. [Special Pickup by other localities.pdf](#)
6. [12-3-11 Letter from Citizen.pdf](#)

**RECOMMENDATION:**

To encourage citizen consideration and comments we propose an article in the Town Newsletter and follow-up discussion at a regular Council Meeting. After the discussion a public hearing can be set to revise the Town Code. The additional inspector position can be approved through the budget process.

# TOWN OF VIENNA

## GEOGRAPHIC INFORMATION SYSTEMS

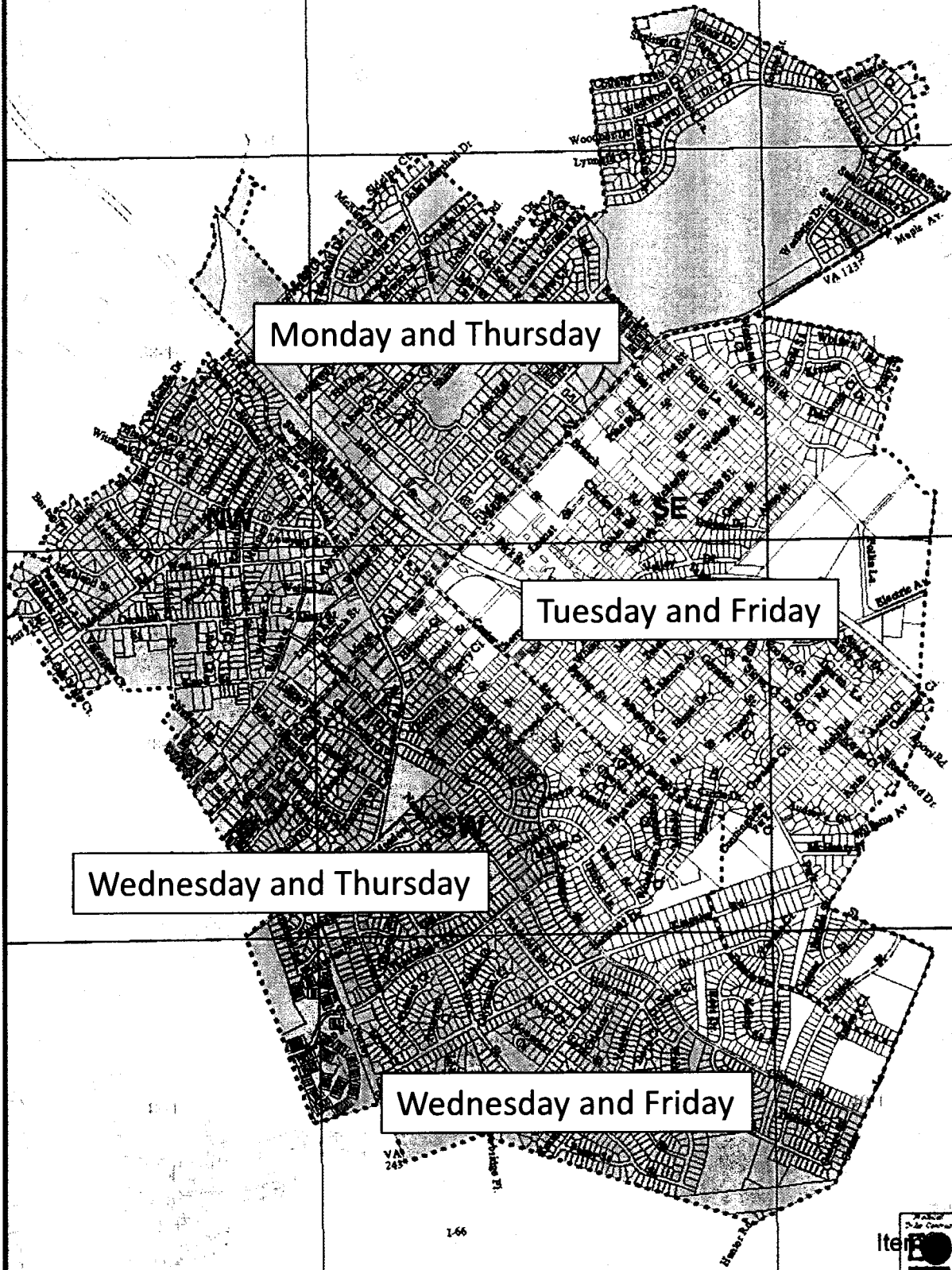
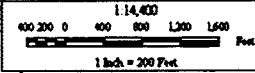
**pickup**

	Monday & Thursday
	Tuesday & Friday
	Wednesday & Saturday
	Wednesday & Thursday

## Current Collection Routes & Days (does NOT include "special pickups")

**Disclaimer:**  
The Town of Vienna, the County of Fairfax and Engineering Systems assumes no responsibility for losses if any, from the use of this map or any related data.

## Trash Collection





# TOWN OF VIENNA

## Proposed Collection Routes & Days (DOES include "special pickups")

TOV Boundary	ROW	<b>Bulk Pick-Up Areas</b>	
- Quadrant	Parcel	1	4
		2	5
		3	

Date Prepared: October 13, 2011

Reference #: 65



Tuesday

Monday

Wednesday

Thursday

Friday

1,000 500 0 1,000 2,000

Feet

1 inch equals 1,700 feet  
This scale only relevant for 8.5" x 11" prints

## **ATTACHMENT 3**

Special Pickup material photos

Could be collected in trash truck weekly

Special Pickup material – could be collected in trash truck weekly



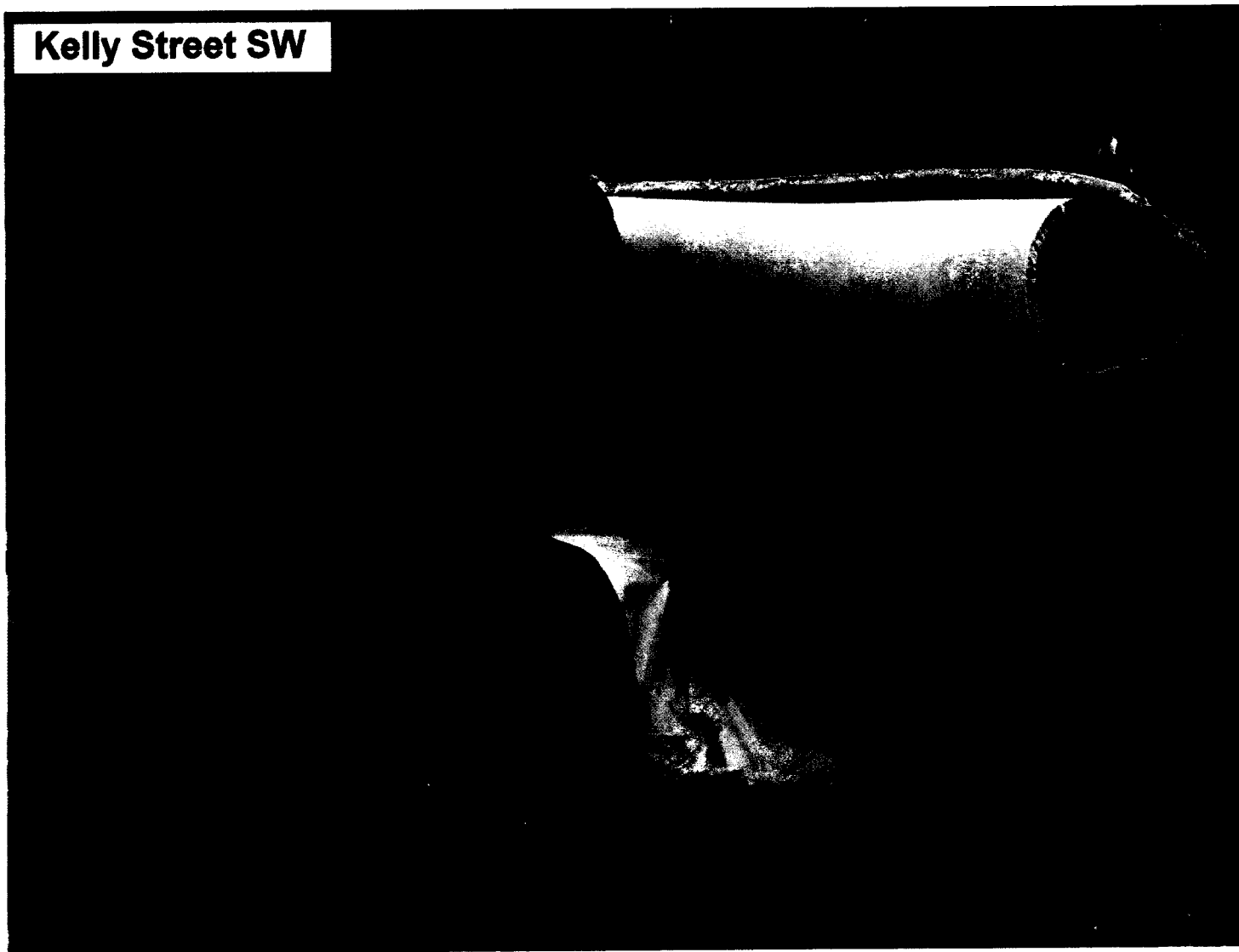
**Cottage Street SW**

Special Pickup material – could be collected in trash truck weekly



Special Pickup material – could be collected in trash truck weekly

**Kelly Street SW**

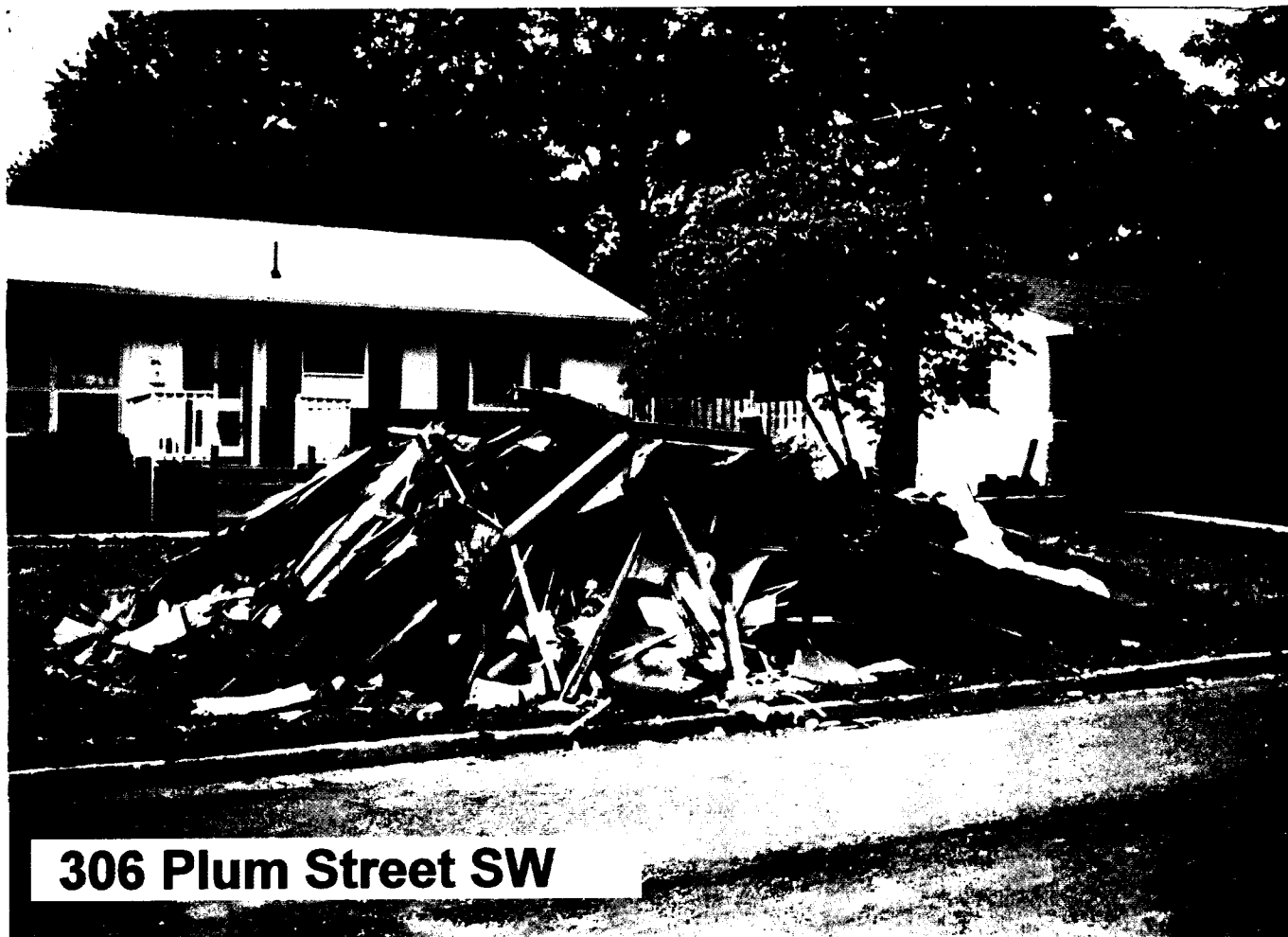


Item # 1

## **ATTACHMENT 4**

Contractor material photos

Contractor material dumped in right-of-way for Town to collect



**306 Plum Street SW**

Contractor material dumped in right-of-way for Town to collect



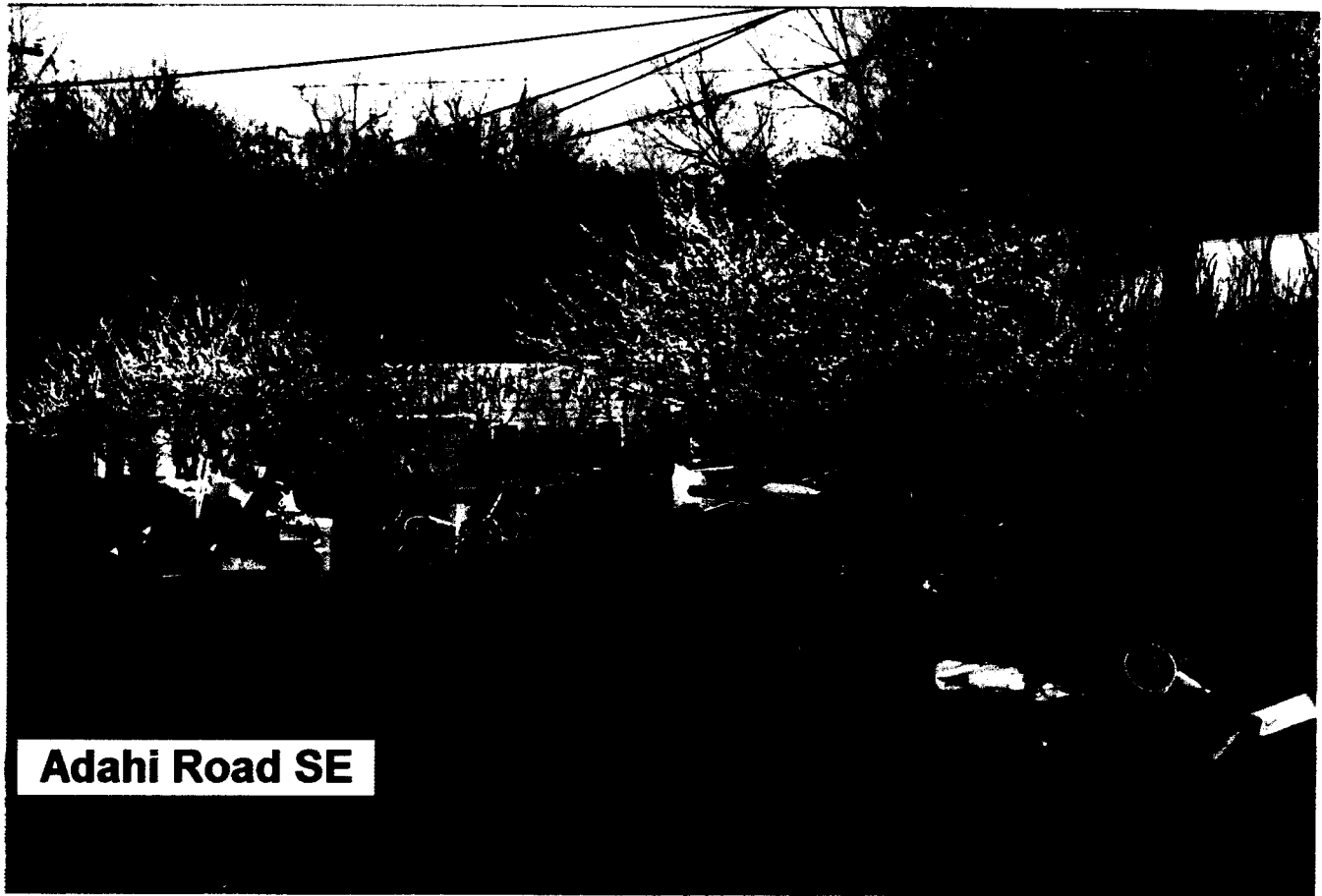


Contractor material dumped in right-of-way for Town to collect



**924 Park Street SE**

Contractor material dumped in right-of-way for Town to collect



Contractor material dumped in right-of-way for Town to collect

## Highland Street NW



Contractor material dumped in right-of-way for Town to collect



**Dumps and Landfills**  
**Department of Public Works**  
10-21-2011

5 disposal sites

1. Davis Industries, Lorton
  - Metal
2. Fairfax County Incinerator, Lorton
  - Household debris, furniture
  - Tires off rims
3. Fairfax County Transfer Station, West Ox Road
  - Garbage, trash
  - Brush & Limbs
  - P&R Department brush
  - Grass clippings
  - Bundled brush
4. Lorton Landfill
  - Dirt, concrete, masonry, construction debris
  - Spoils, e-waste
5. Waste Management, Merrifield
  - Single Stream recycling

Vienna does not pick up:

White goods (appliances)

Potentially hazardous materials

- Paint in cans
- Fertilizer or insecticides
- Containers of compressed gas like propane, oxygen

Tires on rims

Dirt or other construction debris

Stumps

**Special Pickups in Various Jurisdictions**

	Call In?	Fee?	Outsourced?	Electronics?	Yard Waste	Metals/ Appliances	Leaves	Brush/ Stumps	Lumber	Concrete/ Brick/ Asphalt	Adopt-a-Truck	Paint	Household Hazardous Waste	Contractor Generated Debris	Penalties
Fairfax City	No Call in Necessary	none	NO		Trash Day	Trash Day	Vacuum in Fall	Trash Day	Trash Day	Trash Day	YES	Take to Landfill	Take to Landfill	NOT COLLECTED Contractor must take care of it	
Falls Church	Call Monday Before	\$75 debris \$30 appliances	NO		Wednesday	Wednesday		Wednesday	Wednesday	Wednesday	NO	Take to Landfill	Take to Landfill	NOT COLLECTED Contractor must take care of it	\$100 first violation \$150 subsequent violations
of Leesburg	Call Thursday Before	Free to residents and some businesses	YES CSI		Friday	No Freon containing appliances (will collect if Freon is removed)		Regular Brush Collection	Friday Must be less than 5'	No	NO	Take to Landfill	Take to Landfill	NOT COLLECTED Contractor must take care of it	
of Manassas	No Call in Necessary	none	NO		Trash Day	Trash Day (must call if putting out an appliance)	Monday (bagged)	NO Stumps - Brush collected with yard waste on Monday	Trash Day 4' lengths	1 cu yd only - if more, take to landfill	YES \$75.00	Take to Landfill	Take to Landfill	NOT COLLECTED Contractor must take care of it	
gton County	Call ahead to arrange. main rule is items must fit inside regular refuse truck and not be too heavy for men to lift			\$20 TVs \$15 Monitors Call to schedule	No	Put out on Trash Day must call in by 6:30 am same day to have collected	Fall Pickup	NO Stumps Brush collected with yard waste on trash day - limited to two trees only and 150 requests per day	Under 4' in length less than 150 lbs	Less than 500 lbs	NO	Take to Landfill	Take to Landfill	NOT COLLECTED Contractor must take care of it	
of Alexandria	No Call in Necessary	none	NO		Trash Day	Trash Day - charge \$20 per item	Trash Day	Trash Day			NO	Take to Landfill	Take to Landfill	NOT COLLECTED Contractor must take care of it	
n of Vienna	Must Call in When Items are Placed at the Curb	first two free additional \$75 debris/\$25 brush	NO	Prefer not, but will take if necessary	Up to 20 clear bags on Trash Day	Metals - Yes Appliances - No	Vacuum in Fall or up to 20 clear bags on Trash Day	8' lengths, 6" diameter NO Stumps - collected as special pickup - must call in	Special Pickup	Special Pickup - limit 300 lbs. per load	NO	Take to Landfill	Take to Landfill	NOT COLLECTED Contractor must take care of it	

**Item # 1**

December 3, 2011

Town Council

Town of Vienna, Virginia

For consideration at the December 12 work session discussion regarding the Special Pickup Program:

I recently needed to dispose of a large amount of furniture which the Salvation Army would not take. This was during the Town's leaf collection cycle and I knew that special pickups were not available. I contacted numerous junk pickup/disposal services, for which the minimum fee would have been \$175.00 (unreasonable) to dispose of the items. Finally, I was able to get a friend with a truck to help me out. Even if I had to rent a truck, it would have cost around \$30 (reasonable), plus I would have needed someone to help with the lifting. The bottom line is that we, as town residents, pay for the special pickup services (through our real estate taxes) and we should not have a "black-out" period of 4 out of 12 months of the year.

I know that I, like many residents, only think about this when the need arises. However, when the need does arise, I expect the service, even if there is a small charge. I just should not have to wait 3 months or scramble around finding an alternative.

For your reference, I have attached printouts from the websites of area jurisdictions. The Town of Vienna is the only one that suspends special pickups during leaf collection.

Thank you for your consideration to revising this program.

  
Pat Dix

413 Mill Street, SE

Vienna



List of Services

**Refuse & Recycling**

- Rules and Regulations
- Commercial Recycling
- Commercial Recycling Report
- Route Finder
- Route Map
- Holiday Schedule
- How to Dispose
- Curbside Recycling
- Where Does My Trash Go?

**Leaf Collection**

- Leaf Collection
- Leaf Collection Map


[Home](#) [Residents](#) [Business](#) [Visitors](#) [City Gov't](#) [Jobs](#) [Calendar](#) [Search](#)
**Refuse & Recycling**

For information call 703.385.7995 or email [Refuse & Recycling](#)

The city collects refuse and recyclable items from all single family homes in the city once a week at no charge. Nearly all items are picked up on the regular collection day with no call-in required. The city also operates a recycling drop off center on Pickett Road. Highlights of the rules and regulations pertaining to city's refuse and recycling services are provided below.

**Rules and Regulations**

Household Refuse Collection  
 Recyclable Collection  
 Yard Waste  
 Metals/Appliances  
 Leaves  
 Brush and Stumps  
 Lumber  
 Debris  
 Paint  
 Household Hazardous Waste  
 Contractor's Debris and Yard Waste  
 Penalty

**Relevant Links**

- [Fairfax County](#)
- [www.knowtoxics.com](http://www.knowtoxics.com)
- [Contact Us](#)

**Relevant Agencies**

- [Public Works](#)

**Household Refuse Collection ▲**

- Refuse collection is provided to all single-family homes on a once-per-week basis.
- Refuse, non-recyclable kitchen waste and household refuse is collected. Pets must be secured.
- Sofas, mattresses, televisions, tires and carpet placed at the curb will also be collected.
- Place needles in thick plastic containers labeled "SHARPS." For more information on medical waste disposal, please visit the Fairfax County's Web site
- Refuse must be placed in plastic or metal refuse cans with lids or in plastic bags. Do not store refuse cans in the front yard.
- Residents must provide their own trash cans. Size/weight of can must not exceed 35 gallons or 60 pounds.
- Residents must place all refuse at the curb. Refuse cans must be within 150 feet of the curb.
- Refuse may be set out at the curb no earlier than dusk the evening prior to collection. Refuse cans are to be removed from the street by 8 pm on collection day.

**Recyclable Collection ▲****Download Recycling Guide**

- Each household is required to recycle plastic, milk, soda and water jugs, glass bottles and jars, metal and aluminum cans, newspapers with inserts, catalogs, magazines and flattened cardboard and paperboard. Containers must be rinsed and caps or lids removed. Place newspaper in plastic or paper bags. Cardboard must be flattened and be no larger than 3'x 3'x 6".
- Collection is once per week on regular refuse collection day. No call-in necessary.
- City-supplied or similar plastic bins are required and must be placed at the curb by 7 AM.
- For bins, call 703.385.7995 or email. For missed pick-ups, call 703.385.7995 or email.

**Yard Waste ▲**

(grass &amp; shrub clippings, twigs, limbs, acorns, flower &amp; garden vegetation)

- No call-in necessary. Pick up will be on regular household refuse collection day. Place containers at curb on regular refuse collection day.
- All grass and shrub clippings, twigs, limbs, acorns, flower and garden vegetation

Item # 1



may be intermixed and must be placed in plastic or paper bags, or labeled trash cans. All yard waste must be placed in containers. Do not place piles of yard waste in the street. The city does not clean up piles of yard waste directly from the street.

- Citizens are encouraged to leave grass clippings on the lawn or to compost. For information on composting, call 703.385.7995 or email

#### **Metals/Appliances ▲** (metals are banned from the landfill)

- No call-in necessary. Pick up will be on regular household refuse collection day.
- Stoves, hot water heaters, air conditioners, swing sets, car parts, storm doors and windows, etc., are collected.
- Doors must be removed from refrigerators and freezers.
- Place at curb no more than 24 hours before collection day.

#### **Leaves ▲**

- No call-in necessary.
- Leaves are collected by vacuum suction trucks April, November and December.
- Leaves must be raked or placed at the curb or street edge. Do not include mix limbs, branches, rocks, etc., into leaf piles, as these items damage equipment. However, small items, such as grass clippings, weeds and acorns, may be included.
- Bagged or canned leaves will not be collected during leaf season (April, November and December).
- For collection of leaves other than April, November and December, leaves must be placed in paper bags, plastic bags or trash cans and set at the curb the same as other yard waste for collection on regular trash collection day.

#### **Brush and Stumps ▲**

- No call-in necessary. Pick up will be on regular household refuse collection day.
- Limbs, branches, tree trunks, etc., are to be no more than 8 feet in length.
- This service is for large piles of brush or stumps only. (For small amounts of twigs, brush and limbs, see instructions for "Yard Waste.")
- Do not place piles under **POWER LINES** or trees, or close to shrubs, walls or vehicles. Place all piles in an open area accessible to the crane truck.
- Large piles of brush may be placed at the curb one week prior to collection.

#### **Lumber ▲**

- No call-in necessary. Pick up will be on regular household refuse collection day.
- Treated and untreated lumber must be placed at the curb in separate piles. Untreated lumber is ground into mulch; treated lumber is toxic and must be disposed of by the city at special landfills.
- Lumber is to be no longer than 8 feet. Please bend nails.
- Large piles are collected by crane truck. Do not place materials under power lines or trees, or next to shrubs or vehicles. Place in an open area.
- Small amounts of untreated lumber can be placed in trash cans and set at curb with yard waste on regular trash collection day.

#### **Debris: concrete, brick, asphalt, etc. ▲** (debris is banned from the landfill)

- No call-in necessary. Pick up will be on regular household refuse collection day.
- Large amounts of bulky material such as drywall, asphalt shingles, brick, concrete, rocks, plate glass, and railroad ties are collected. Separate piles.
- Loose dirt may not be placed at the curb. Please contact 703-385-7995 for details on restrictions and arrangement for pick up.
- Piles containing recyclables, such as brush, metals and leaves, will not be collected with debris.

- Small amounts of debris must be placed in trash cans weighing no more than 60 pounds.
- For propane tank disposal, tanks may be taken to Fairfax County Transfer Station, 4618 West Ox Road, and are accepted at no charge (703.324.5040 for information). Fairfax Propane also accepts tanks for a fee (703.352.5777 for information).
- Small amounts of debris not in containers will not be collected.
- Bend nails and other sharp objects.

*Remember: the city collects these items from the curb on regular collection day, which requires no special arrangements. Simply place these items at the curb, separate from refuse and recycling, for city collection.*

#### Paint ▲

- Oil based paint is considered to be hazardous waste, please refer to Household Hazardous Waste information for proper disposal information.
- Latex based paints are not collected unless they are completely dried. To speed drying, leave tops off and add kitty litter. Dried latex paint cans may be placed at the curb with tops off for collection.

#### Household Hazardous Waste ▲

- Pesticides, oil-based paint, gasoline, thinner and other hazardous waste must be taken by the homeowner to the Fairfax County Transfer Station located at 4618 West Ox Road. Call 703.324.5068 for information or go to the County's web site▲.

#### Contractor's Debris and Yard Waste ▲

- Brush, leaves, grass clippings, building materials, etc., resulting from work performed by contractors will not be collected (Chapter 74, Section 74-4(F)(2) City Code▲). Contractors are required to haul away their own debris.

#### Penalty ▲

- Repeated violations of Refuse and Recycling Regulations can result in a \$25 fine.

If you have any questions, please call 703.385.7995 or email

**City Hall**  
10455 Armstrong St.  
Fairfax, Virginia 22030  
Other Gov't Offices.

Information Provided by the Refuse & Recycling Division; 703.385.7995.

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Saturday, November 26, 2011

**Government****Boards & Commissions****Budget****City Council****City Clerk****City Directory****City Webcasts****Courts & Laws****Departments****Documents & Records****Elected Officials****Emergency Preparedness****Licenses & Permits****Purchasing****Voter Registration****Schools****Working for the City****Open Poll****What is your favorite special day in November?**

Civil War Reenactment at Cherry Hill Farm (Nov. 26)  
End of Daylight Savings Time (Nov. 6)  
Election Day (Nov. 8)  
Mark Twain's Birthday (Nov. 28)  
Thanksgiving (Nov. 24)  
Veterans Day (Nov. 11)

[Vote](#)[View Results](#)**Leaf Collection**

The Department of Public Works collects loose leaves curbside from residential solid waste customers from mid-October to mid-December each year.

**Set-Out Requirements**

**What** - Vacuum leaf collection is intended to remove loose leaves that have fallen from deciduous trees in the fall. Do not mix other yard debris with leaves as it may damage equipment.

**When** - Residential streets are vacuumed from mid-October through mid-December each year. Each residential street is vacuumed at least two times. Collection schedules are changed and updated depending on the timing of the leaf drop, weather conditions, volume of leaves, and crew progress.

**Where** - Rake loose leaves to the curb but avoid placing them in the street. Pile leaves away from storm drains and water meter covers. Keep all other collection material at least five feet away from leaf piles.

For more information, call Public Works at 703-248-5083 (TTY 711).

**Reminder:** Bundled brush and yard waste bag collection continues throughout the leaf collection season on Wednesdays.

**What Happens to the Collected Leaves**

The leaves that are collected are processed into high-quality leaf mulch, which is available for self-loading at the Recycling Center beginning in March.

**Solid Waste Services****Business Hazardous Waste****Business Recycling****Brush Collection****Christmas Tree Collection****Household Hazardous Waste****Leaf Collection****Leaf Mulch****Litter Prevention****Recycling Center****Recycling Collection****Recycling Extravaganza****Special Bulk Collections****Street Sweeping****Trash Collection****Yard Waste Collection****Related Links****Resources for Residents, Businesses, and Developers****Contact Us**

Dept. of Public Works:  
Solid Waste Services  
7100 Gordon Road

Falls Church, VA 22046

703-248-5081 (TTY 711)  
703-248-5336 fax  
recycling@fallschurchva.gov

Hours  
Monday-Friday  
8 a.m.-5 p.m.

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300 Park Avenue | Falls Church VA 22046 | 703-248-5001 (TTY 711)

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Item # 1

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Saturday, November 26, 2011

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### Open Poll

#### What is your favorite special day in November?

Civil War Reenactment at  
 Cherry Hill Farm (Nov. 26)  
 End of Daylight Savings Time  
 (Nov. 6)  
 Election Day (Nov. 8)  
 Mark Twain's Birthday (Nov.  
 28)  
 Thanksgiving (Nov. 24)  
 Veterans Day (Nov. 11)

[Vote](#) [View Results](#)

## Special Bulk Collections

Special collections occur on Wednesdays, year-round (except City observed holidays). Only residential curbside customers receiving solid waste collections are eligible for special collection services.

Special bulk collections are available for items too large or heavy to fit into a trash container or yard debris such as brush exceeding six inches in diameter, furniture, moving debris, and household appliances.

The City accepts 20 requests per week on a first come, first served basis. Residents may request a special collection by calling 703-248-5160 (ext. 4) before Monday at noon for Wednesday collection. Leave a detailed message with the type of material for collection. Take note of the collection date provided at the beginning of the recorded message.

Items must be at the curb by 7 a.m. on Wednesday. Depending on the types of material set out, several different trucks may be assigned to collect your materials.

Refuse and special collection services are provided only for the removal of materials resulting from normal residential use and routine home maintenance. Solid waste from any work done by a contractor may NOT be included with special collections. Contractors must arrange for the removal of solid waste or contact a private company to make alternative collection and disposal arrangements.

## Fees

Beginning August 1, 2011, the fee for special bulk collection increased to \$75 per two cubic yards of material (from \$65) and the appliance collection fee increased from \$30 per appliance (from \$25). Bulk collections are provided for bulky items too large to fit inside a trash cart/can and for unbundled brush resulting from routine home maintenance and landscaping. Contractor's waste will not be collected. To schedule a bulk collection, call 703-248-5160 (option 4).

## Penalties

Violations are subject to a civil penalty of \$100 for the first violation and \$150 for each subsequent violation.

## Contact Numbers

Special Collection Request Line	703-248-5160 (Option 4)
Billing Questions	703-248-5176 (TTY 711)
General Questions	703-248-5176 (TTY 711)
Solid Waste Code Enforcement	703-248-5176 (TTY 711)

## Solid Waste Services

[Business Hazardous Waste](#)  
[Business Recycling](#)  
[Brush Collection](#)  
[Christmas Tree Collection](#)  
[Household Hazardous Waste](#)  
[Leaf Collection](#)  
[Leaf Mulch](#)  
[Litter Prevention](#)  
[Recycling Center](#)  
[Recycling Collection](#)  
[Recycling Extravaganza](#)  
[Special Bulk Collections](#)  
[Street Sweeping](#)  
[Trash Collection](#)  
[Yard Waste Collection](#)

## Related Links

[Resources for Residents, Businesses, and Developers](#)

## Contact Us

Dept. of Public Works:  
 Solid Waste Services  
 7100 Gordon Road

Falls Church, VA 22046

703-248-5081 (TTY 711)  
 703-248-5336 fax  
[recycling@fallschurchva.gov](mailto:recycling@fallschurchva.gov)

Hours  
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 8 a.m.-5 p.m.

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Saturday, November 26, 2011

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The Department of Public Works (DPW) manages solid waste for the City, including a comprehensive range of services:

- Weekly curbside collection of trash, bundled brush, yard waste and recyclables
- By request, special residential collection of bulk items
- Refuse and recycling collection for all municipal facilities including street cans
- The City's Recycling Center
- Special events: two Recycling Extravaganza events, one Household Hazardous Waste event, and two City-wide Cleanup events

In performing these tasks, the City collects approximately 6,600 tons of solid waste annually, including:

- 2,300 tons of refuse
- 1,500 tons of loose leaves
- 400 tons of brush and yard waste
- 2,000 tons of recyclable materials (950 tons from the recycling center)

**Recycling**

Recycling, along with refuse collection, transfer and disposal, is governed by the City's integrated solid waste management plan. The plan aims to decrease the amount of waste generated in the City by increasing source reduction, reuse and recycling. The City's Recycling program also supports litter prevention activities and solid waste management initiatives, with the assistance of approximately 150 citizen volunteers.

Recyclable materials include those collected curbside (cart and green bin program, yard waste bags, brush and leaves) and at the Recycling Center. These collected materials are recycled, diverting material from the waste stream. In addition to environmental stewardship benefits, the City benefits economically by generating modest revenues and reducing waste disposal costs. Through the robust nature of its recycling service and outreach to its residents, the City enjoys the highest waste diversion rate (recycling rate) in Virginia.

Recycling is collected from curbside residential customers weekly on Wednesday's year-round (except on observed city holidays).

**Trash**

Trash is collected from curbside residential customers weekly on Wednesdays, year round (except on observed City holidays). DPW manages the contract for trash collection, and provides related services

**In This Section****Business Hazardous Waste****Business Recycling****Brush Collection****Christmas Tree Collection****Household Hazardous Waste****Leaf Collection****Leaf Mulch****Litter Prevention****Recycling Center****Recycling Collection****Recycling Extravaganza****Special Bulk Collections****Street Sweeping****Trash Collection****Yard Waste Collection****Options Pool****What is your favorite special day in November?**

- Civil War Reenactment at Cherry Hill Farm (Nov. 26)
- End of Daylight Savings Time (Nov. 6)
- Election Day (Nov. 8)
- Mark Twain's Birthday (Nov. 28)
- Thanksgiving (Nov. 24)
- Veterans Day (Nov. 11)

[Vote](#)[View Results](#)**Related Links****Resources for Residents, Businesses, and Developers****Contact Us**

Dept. of Public Works:  
Solid Waste Services  
7100 Gordon Road

Falls Church, VA 22046

703-248-5081 (TTY 711)  
703-248-5336 fax  
[recycling@fallschurchva.gov](mailto:recycling@fallschurchva.gov)

Hours  
Monday-Friday  
8 a.m.-5 p.m.

Item # 1

for the community, including special bulk pickups.

### **Street Sweeping**

DPW manages the **street sweeping** contract. Regular street sweeping is required by stormwater management regulations and benefits the City by significantly reducing the volume of pollutants entering local streams through the City's 900 storm drain openings. It also reduces the cost of storm sewer cleaning efforts and the chance of blockages in the system.

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# Welcome to the TOWN OF HERNDON

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## Town Services

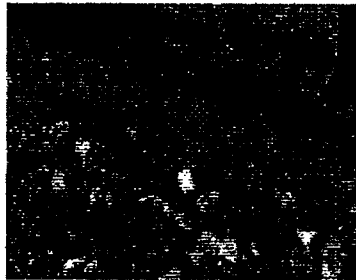
- Refuse/Recycling
- 2011 Trash Collection Schedule
- Household Hazardous Waste
- Interactive Refuse Collection Day map
- Refuse and Yard Waste Regulations
- About Public Works
- Water and Sewer
- Streets
- Public Works Projects
- Stormwater Mgmt
- Building Inspection
- Taxes/Licenses
- Procurement
- Report a Problem
- Directory
- Home



Home > Town Services > Refuse/Recycling > Refuse and Yard Waste Regulations

## Yard Waste and Brush

### LEAF COLLECTION



Curbside leaf collection will begin the week of October 24th and continue through December 2, 2011 as follows:

October 24 - 28	North of Bike Trail
October 31 - November 4	South of Bike Trail
November 7 - 11	North of Bike Trail
November 14 - 18	South of Bike Trail
November 21 - 25	North of Bike Trail
November 28 - December 2	South of Bike Trail

Rake leaves as close to the curb as possible for collection. Please do not block storm sewers, driveways or sidewalks.

[Click here to see whether you live north or south of the Bike Trail.](#)

### YARD WASTE

Yard waste includes grass cuttings, shrub clippings, weeds, and leaves.

Yard waste must be placed in 30 gallon kraft paper recyclable bags available at local home improvement stores.

### BRUSH

Brush must be cut and tied in bundles not to exceed four (4) foot in length and weighing no more than Fifty (50) pounds. Tree trunks, tree limbs, and stumps must be no more than three (3) inches in diameter and meet the above criteria for weight and bundling. Trees and stumps cut by tree companies or contractors will not be removed by the Town.

### COLLECTION

Yard waste is collected once a week on the same day as your scheduled refuse collection day. Yard waste and brush should not be placed at the

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## Visit Us

**Department of Public Works**  
777 Lynn Street  
Herndon, VA 20170  
(703) 435-6853

**Operations Center**  
1479 Sterling Road  
Herndon, VA 20170  
(703) 435-6860

**Email**  
[publicworks@herndon-va.gov](mailto:publicworks@herndon-va.gov)

Item # 1

curb for more than twenty-four (24) hours prior to the scheduled collection day, and must be at the curb by 7:00 a.m. of the scheduled collection day.

**CONTACT**

If you have any questions regarding yard waste please call the Department of Public Works at 435-6853 or email [publicworks@herndon-va.gov](mailto:publicworks@herndon-va.gov)

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**TOWN OF HERNDON, VIRGINIA  
DEPARTMENT OF PUBLIC WORKS**

**SPECIAL COLLECTION APPLICATION**

Pickup Day: \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Daytime Telephone Number: \_\_\_\_\_

Describe Item(s): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**CONDITIONS:**

1. Items requiring special collection are to be placed at the curb by 7:00 a.m.
2. A fee of **\$35** must be paid in full before any collection takes place.
3. Items cannot be placed at the curb earlier than 24 hours before your collection day.
4. Items left for collection shall be three cubic yards or less.
5. An additional **\$35** will be assessed when this limit has been exceeded, up to six cubic yards.

**NOTICE:**

**BUILDING MATERIALS, LUMBER, CONCRETE, YARDWASTE, EARTH, ROCKS,  
PLUMBING FIXTURES, COMBUSTIBLE MATERIALS, PAINT OR PAINT THINNER, AUTO  
PARTS, AND DANGEROUS CHEMICALS CANNOT BE COLLECTION AS PER TOWN  
CODE SECTION 62-4.**

I have read and understand the conditions of the special collection:

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**To schedule a special collection please bring completed application to the Department of  
Public Works, 777 Lynn Street, 2<sup>nd</sup> floor. No special collections are available on  
Wednesdays, Saturdays, Sundays or scheduled town holidays.**

OFFICIAL USE ONLY

RECEIPT NUMBER \_\_\_\_\_ DATE: \_\_\_\_\_ BY: \_\_\_\_\_


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## Special Collections & Requests

### 1. Schedule a Pickup

This scheduling system is for county collection customers and may only be used when materials are placed directly in front of your house. If materials are placed in any other location, such as around the corner or across the street, you must call 703-802-3322, TTY 711, to speak with a customer service representative.

#### Important Guidelines for Oversized Items | Items to Avoid Setting Out for Curbside Collection

**Special Instructions:** Your special pickup will be scheduled for your next regular trash collection day. For submissions made after 2:30 p.m. the day before your regular collection day, your special pickup request will be scheduled for the following week. If, for any reason, your trash pickup is delayed, your special pick up will also be delayed and collected the same day that your trash is collected. If you have any questions, please contact a customer service representative at 703-802-3322, TTY 711.

Please provide the following information:

Street Number:

Street Suffix: (A, B, etc.)

Street Name:

Street Type:

Daytime Phone:

Type of Pickup:

**Freon-containing Appliance** (refrigerator/freezer, dehumidifier, air conditioner with freon). Place in separate piles for collection. Note: Freon-containing appliances require a special truck for collection.

**Metal Appliances and other metal items** (stove, washer/dryer, metal shelves, etc.). Place in separate piles for collection.

**Bulk Material** - Bulk means household items generally not completely made of metal (couches, chairs, or lumber) no longer than 8 feet in length (No Freon/No propane cylinders). Bulk items must be placed out separately for collection and be separated by material type.

**Brush/Limbs** - Brush means shrubs, tree limbs, under 6 inches in diameter/6 feet in length with no pieces weighing more than 50 pounds. (No lumber). Brush items must be placed out separately for collection.

Comments:

Example: Items placed on south end of property (250 Characters MAX)




### 2. Trash/Recycling Container Service Request

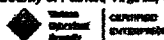
Report a damaged or missing container or request a new one Trash/Recycling Container Service Request

### 3. Submit a Comment/Complaint

To report a problem related to your collection service, please submit your concerns to us in writing or call 703-802-3322, TTY 711, Monday - Friday, between 7:30 a.m. and 4:30 p.m. to speak to a customer service representative.

Contact Us: [General \(Office of Public Affairs\)](#) | [Technical \(Web Administration\)](#) | [Directed Inquiries \(County Agencies\)](#)  
 Phone: County Main Number - 703-FAIRFAX (703-324-7329), TTY 711 | [County Phone Listing](#)

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☒ Website

Website Survey

☒ Globe with various flags representing Web site language

Language Translations

Item # 1

TOWN OF VIENNA  
TOWN COUNCIL WORKSESSION ITEM  
December 12, 2011  
8:00 PM

 Print

ITEM NO. 2

Public Private Education Act Guidelines (PPEA)

**BACKGROUND SUMMARY:**

The Public-Private Education Facilities and Infrastructure Act of 2002 (the "PPEA") grants responsible public entities the authority to create public-private partnerships for the development of a wide range of projects for public use if the public entities determine there is a need for the project and that private involvement may provide the project to the public in a timely or cost-effective fashion. The PPEA defines "responsible public entity" (RPE) to include any public entity that "has the power to develop or operate the applicable qualifying project." Individually negotiated interim or comprehensive agreements between a private entity and an RPE will define the respective rights and obligations of the RPE and the private entity.

**OVERVIEW:**

In order for a project to come under the PPEA, it must meet the definition of a "qualifying project." The PPEA contains a broad definition of qualifying project that includes public buildings and facilities of all types; for example:

- (i) An education facility, including but not limited to a school building (including any stadium or other facility primarily used for school events), any functionally related and subordinate facility and land to a school building and any depreciable property provided for use in a school facility that is operated as part of the public school system or as an institution of higher education;
- (ii) A building or facility that meets a public purpose and is developed or operated by or for any public entity;
- (iii) Improvements, together with equipment, necessary to enhance public safety and security of buildings to be principally used by a public entity;
- (iv) Utility and telecommunications and other communications infrastructure;
- (v) A recreational facility;
- (vi) Technology infrastructure and services, including but not limited to telecommunications, automated data processing, word processing and management information systems, and related information, equipment, goods and services;
- (vii) Technology, equipment, or infrastructure designed to deploy wireless broadband services to schools, businesses, or residential areas;
- (viii) Services designed to increase the productivity or efficiency through the use of technology or other means;
- (ix) Any improvements necessary or desirable to any unimproved locally- or state-owned real estate; or
- (x) A solid waste management facility that produces electric energy from solid waste.

**SUMMARY/STAFF IMPRESSIONS:**

The Council must adopt Public Private Education Act guidelines before using the process.

**DOCUMENTS ATTACHED:**

No Attachments Available

**RECOMMENDATION:**

I recommend the Town Council consider setting a Public Hearing date for the Town to consider utilizing the Public Private Education Act guidelines.

TOWN OF VIENNA  
TOWN COUNCIL WORKSESSION ITEM  
December 12, 2011  
8:00 PM

ITEM NO. 3

 Print

RFP for Maple Avenue Commercial Corridor Zoning Code Update

**BACKGROUND SUMMARY:**

At the November 14, 2011 Town Council Work Session, the Council came to a consensus that the Zoning Ordinance should be updated to reflect an increased building height of 54' feet along the Maple Avenue (East and West) Corridor. The Council directed the Department of Planning & Zoning to prepare a draft Request for Proposal (RFP) to solicit firms in assisting the rewrite of the Zoning Ordinance.

**OVERVIEW:**

The proposed RFP outlines the four (4) phases of the project as discussed at the November 14, 2011 Work Session. The RFP states that the consultant will be approved to move from phase to phase based upon funding availability, and that the contract will be renewable, by Council Approval, for four (4) years.

**SUMMARY/STAFF IMPRESSIONS:**

The RFP has been prepared based upon feedback received by the Council at various meetings and the Town Council Work Session.

**DOCUMENTS ATTACHED:**

1. [RFP 12-06 {DRAFT} MAPLE AVE ZONING CODE.pdf](#)

**RECOMMENDATION:**

Town Council approval to issue the RFP for planning services.

## REQUEST FOR PROPOSAL

**RFP NUMBER:** 12-06

**RFP SUBJECT:** MAPLE AVENUE COMMERCIAL CORRIDOR ZONING  
CODE UPDATE

**PROPOSALS SHOULD BE SUBMITTED TO:**

Purchasing Agent  
Town of Vienna  
127 Center Street, S.  
Vienna, Virginia 22180

**SEALED PROPOSALS**

**DUE DATE AND TIME:** TBD AT 11:00 AM

All inquiries should be made, in writing, to Gina Gilpin, Purchasing Agent, at [ggilpin@viennava.gov](mailto:ggilpin@viennava.gov) by  
**TBD AT 2:00 PM.**

In compliance with this Request For Proposal and to all the conditions imposed herein, the undersigned offers and agrees to furnish the services in accordance with the attached signed proposal or as mutually agreed upon by subsequent negotiation.

**NAME & ADDRESS OF FIRM:**

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
EEI/FIN NO: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_ TITLE: \_\_\_\_\_  
(Date)

TELEPHONE NO: \_\_\_\_\_ EMAIL: \_\_\_\_\_

## REQUEST FOR PROPOSAL

RFP 12-06

### MAPLE AVENUE COMMERCIAL CORRIDOR ZONING UPDATE

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**1. ADVERTISEMENT**

**REQUEST FOR PROPOSAL**

Sealed proposals will be received by the Town of Vienna, Virginia at the Purchasing Office, 127 Center Street, South, Vienna, Virginia 22180, for:

- **RFP 12-06 MAPLE AVENUE COMMERCIAL CORRIDOR ZONING UPDATE**
- **PROPOSALS DUE: TBD at 11:00 AM**

On the above proposal due date and at the time specified, proposals so received will be publicly opened and logged. Copies of solicitations are available online at [www.viennava.gov](http://www.viennava.gov) and from the Purchasing Agent at the above address or by calling (703) 255-6359 during normal business hours (8:00 AM - 4:30 PM), daily except Saturday, Sunday, and Holidays.

PUBLICATION:  
THE EXAMINER  
TBD, 2011

## **RFP 12-06- MAPLE AVENUE COMMERCIAL CORRIDOR ZONING UPDATE**

### **2. PURPOSE & OVERVIEW**

The Town of Vienna is soliciting proposals for planning services from qualified planning and design firms interested in assisting in a significant comprehensive update to the Zoning Ordinance. The selected firm will be asked to prepare amendments to the Zoning Ordinance that are consistent with the Town's Comprehensive Plan, and the current zoning and planning principals for increased building heights along the Maple Avenue (East and West) Corridor. The selected firm will be responsible for presenting the amendments to the Town's various Boards and Commissions at public forums to receive their consent on the amendments prior to being presented to the Town Council for approval. It is expected that the selected firm will work closely with the Town Staff during the entirety of the project. The project will involve attendance at public hearings, various Boards and Commissions, and Town Council meetings.

The Town of Vienna is an incorporated town located in the northeastern portion of Fairfax County, Virginia. The Town of Vienna's land use issues and patterns are similar to other small towns and communities throughout the region. The Town has gone through the three (3) following stages of development: as a small rural village at the crossroads of a major road and a railroad; as an early "suburb" that was primarily dependent upon electrical rail service for its commuters; and as a growing modern suburb dependent upon automobile. Today, while Vienna prides itself as a small town with a predominately single-family residential character, it is in the fourth development stage as a town: that of a mature "built-out" community facing the issues of residential preservation and commercial revitalization.

In November 2001, the Town of Vienna held a Charrette to discuss the future development patterns of the community. Out of the Charrette the Maple Avenue Vision Committee was created to study the land use patterns along Maple Avenue East and West. The Committee met every two (2) weeks for over two (2) years. In March 2005, the Committee recommended to the Town Council that the use of a Form-based Code would clearly steer future commercial development in the Town. During the presentation the Committee noted that bulk plane standards should also be studied along Maple Avenue. The Town Council took their suggestions under advisement; however, no changes to the Town Code were made.

During the period of November 2010 through June 2011, a firm was contracted with the Town to provide photo renderings illustrating building heights of 35 feet, 50 feet, and 54 feet, at both 15' and 30' foot setbacks. On June 13, 2011, a Town Council Work Session was held and the Mayor and Town Council were provided with the final version of the Maple Avenue Photo Renderings. After consideration by the Council, a consensus was made at a subsequent work session to allow for a 54' feet maximum building height, at a 15' foot setback. The successful firm will work with the Council to create a vision for the Maple Avenue Corridor, which illustrates an increased building height limit without negatively impacting the single-family residential character of the Town.

### **3. ESSENTIAL DUTIES AND RESPONSIBILITIES**

The Town of Vienna intends to amend its current zoning regulations for the zoning districts located in the Maple Avenue Corridor. This project will involve evaluating if overlay zones will be



## **RFP 12-06– MAPLE AVENUE COMMERCIAL CORRIDOR ZONING UPDATE**

incorporated or if a complete re-write of the commercial zoning ordinance is required. This work will include, but not be limited to, examining alternatives to the existing number and types of zoning districts, review of existing definitions, the creation of bulk regulations, provisions related to non-conformities, and any and all other aspects relating to zoning regulations. It is the Town's desire that the new regulations be easily understood by the public, easy to administer, and effectively regulate land uses within the Town.

It is anticipated that the project will be completed in the following four (4) phases:

- **Phase 1**
  - Explore: Existing features in Vienna
    - Team building and site visit for the Mayor and Town Council
    - Identify the strengths and weaknesses of the Town both visually and environmentally, as it is currently exists. Conduct a conversation with the consultant about the Town – in context with the notion that Vienna is a small residential Town that has a commercial spine coupled with various civic and industrial areas.
    - Identify what works in the Town, along Maple Avenue, and what does not.
    - Based on the information gathered above, create a photo essay and narrative reflective of the Mayor and Town Council's impressions.
  - Explore: Examples to draw from
    - Find and evaluate examples of other projects that attempted (successfully) to redefine or enhance their communities through their built environment.
  - Create: A visual and verbal resource document
    - This document should reflect the collective understandings from the questions raised in the Exploring (Existing) portion and the preferred choices from the Exploring (Examples) portion, listed above.
  - Create: A Vision
    - This verbal statement should reflect what is perceived as the best of Vienna and additionally state the conceptual goal for the future.
  - Define: The physical and programmatic limits of the investigation
    - What are the boundaries of this program?
    - What are the subsets of the investigation?

## **RFP 12-06– MAPLE AVENUE COMMERCIAL CORRIDOR ZONING UPDATE**

- **Phase 2**

- Explore: Look at an extensive array of conceptual graphic concepts
  - Explore through sketches of site plans, plans, elevations, planting schemes, and landscaping what configurations and arrangements might be appropriate to what is envisioned as the preferable outcome of the program.
- Explore: A series of zoning and code vehicles to support the above possibilities.
  - Identify the various options, such height, bulk plane, incentives/proffers, setbacks, uses, parking, FAR, and overlay districts.
- Create: The final concept graphics embodying the distillation of the refined preliminary concepts explored above.
  - Types of presentation should be chosen. Options include, but are not limited to the following: rendered plans and site plans, planting schemes, hardscape considerations, lighting considerations, perspectives, models, diagrams, and abstractions.
- Create: The final codification supporting the agreed upon design direction.
  - The decision would be made at this point as to what mechanism would be utilized to support the envisioned outcome. It would involve settling on, for example, an overlay district, incentives/proffers, setbacks, building height, and the location of the new Code within the current Code.

- **Phase 3**

- Discussion: Open up the project to the various Town boards and commissions, and the citizens.
  - Incorporate positive suggestions.
- Refine: The graphic and verbal program responding to the various input garnered above.
  - Ready all documents for collation into final document.
- Synthesize: Program information to resolve and incorporate remaining miscellaneous information.
  - Perform final objective quality control effort.

## **RFP 12-06– MAPLE AVENUE COMMERCIAL CORRIDOR ZONING UPDATE**

- Create: Final document/Code
- **Phase 4**
  - Present: To the public and the various boards and commissions
    - Decide which medium is best (PowerPoint, boards, video, or other medium identified by the successful firm)
  - Vote: Town Council Approval

The successful firm will provide a detailed outline for their approach to the above four (4) outlined phases. Available funding for moving forward with each phase (1 through 4) will be evaluated upon completion of each stage.

### **4. CONTRACT TERM**

- The term of this agreement shall be for one (1) year, subject to renewal for four (4) additional one-year periods at the sole and final discretion of the Town of Vienna.
- The Town as a municipal corporation of the Commonwealth of Virginia is obligated and bound by the terms of this Agreement only to the extent that funds are lawfully appropriated therefore and are allocated and available to pay its obligations hereunder. In the event that and at such time as funds have not been appropriated or are not allocated and available to pay the Town's obligations under this Agreement, then the Town shall not be liable for any obligation to pay for the services referred to in this Agreement.
- It is expressly agreed and understood that the selected firm is in all respects an independent Contractor as to work and is in no respect any agent, servant, or employee of the Town. The contract specifies the work to be done by the firm, but the method to be employed to accomplish the work shall be the responsibility of the firm.

### **5. EVALUATION CRITERIA**

Proposals shall be evaluated based on the criteria listed below. Firms submitting proposals shall include statements addressing the following:

1. Experience in providing the requested services, with preference given to those who have completed zoning ordinance projects in similar-size municipalities. 20%
2. Qualifications and previous related work of key project personnel, particularly with regard to working with municipalities of similar size and government structure. 10%
3. Credentials of staff to be assigned the study (please provide brief resumes including professional experience). 5%

## **RFP 12-06- MAPLE AVENUE COMMERCIAL CORRIDOR ZONING UPDATE**

4. A description of consultant experience in projects involving streetscape designs and visioning. 10%
5. Prior experience and success in working with a diverse group of project “stakeholders.” 25%
6. Responsiveness to submission requirements. 5%
7. Creativity or innovative project approach. 15%
8. Ability to provide deliverables within a reasonable time frame throughout the project schedule. In addition, any innovative approaches to this project will be evaluated. 10%

### **6. PROPOSAL PREPARATION AND SUBMISSION REQUIREMENTS**

#### **A. GENERAL REQUIREMENTS**

1. **RFP RESPONSE:** In order to be considered for selection, Offerors must submit a complete response to this RFP. One (1) original and four (4) copies of each proposal must be submitted to the Purchasing Office. No other distribution of proposals shall be made by the Offeror.
2. **PROPOSAL PREPARATION:** Proposals must be signed by an authorized representative of the Offeror. All information requested must be submitted. Failure to submit all information requested may result in the Purchasing Agent requiring prompt submission of missing information and/or giving a lowered evaluation of the proposal. Proposals which are substantially incomplete or lack key information may be rejected by the Town at its discretion. Proposals should be prepared simply and economically, providing a straightforward, concise description of capabilities to satisfy the requirements of the RFP. Emphasis should be on completeness and clarity of context. Each copy of the proposal should be bound in a single volume.
3. **ORAL PRESENTATION:** Offerors who submit a proposal in response to this RFP may be required to give an oral presentation of their proposal to the Evaluation Committee. This will provide an opportunity for the offeror to clarify or elaborate on the proposal, but will in no way change the original proposal. The Purchasing Agent will schedule the date, time and location of these presentations. Oral presentations are an option and may not be conducted. Therefore, proposals should be complete.

#### **B. SPECIFIC REQUIREMENTS**

1. Proposals should be as thorough and detailed as possible so that the Evaluation Committee may properly evaluate the Offeror's capabilities to provide the required services. Offerors are required to submit the following as a complete proposal:
  - a. RFP cover page, signed and completed as required.

## **RFP 12-06- MAPLE AVENUE COMMERCIAL CORRIDOR ZONING UPDATE**

- b. Section 9 - References.
- c. A written narrative statement to include:
  - 1. Experience in providing the services described herein, focusing on prior services provided to similar types of government entities.
  - 2. Detailed Scope of Work outlining the firm's approach to providing the services, including specific plans for providing services.
  - 3. Project timeline and deliverable date.
  - 4. Name, qualifications and experience of personnel to be assigned to the project.
  - 5. Recently completed projects of similar nature.
  - 6. Current workload of firm.
- d. Statement of understanding of the project requirements.
- e. Equal Opportunity Employment Statement in compliance with Virginia Fair Employment Contracting Act

### **7. AWARD OF CONTRACT**

The Town of Vienna Evaluation Committee shall engage in individual discussions with two (2) or more of the offerors deemed fully qualified by the Evaluation Committee. Repetitive informal interviews shall be permissible. Such offerors shall be encouraged to elaborate on their qualifications and performance data or staff qualifications pertinent to the proposed project, as well as alternate concepts.

At the discussion stage, the Town may discuss non-binding estimates of total project costs including, but not limited to non-binding estimates of cost of services.

Proprietary information from competing offerors shall not be disclosed to the public or to the competitors.

At the conclusion of the informal interviews, on the basis of evaluation factors published in the Request for Proposals and all information developed in the selection process to this point, the Evaluation Committee, shall select, in the order of preference, two or more offerors whose professional qualifications and proposed services are deemed more meritorious. Negotiations shall then be conducted, beginning with the offeror ranked first. If a contract satisfactory and advantageous to the Town of Vienna can be negotiated at a price considered fair and reasonable, the Town Council shall be advised and make the award to that offeror. Otherwise, negotiations with the offeror ranked first shall be formally terminated and negotiations conducted with the offeror ranked second, and so on until such a contract can be negotiated at a fair and reasonable price.

## **RFP 12-06- MAPLE AVENUE COMMERCIAL CORRIDOR ZONING UPDATE**

Should the Evaluation Committee determine in writing that only one (1) offeror is fully qualified, or that one (1) offeror is clearly more highly qualified and suitable than the others under consideration, a contract may be negotiated and awarded to that offeror.

### **8. SPECIAL TERMS AND CONDITIONS**

**Precedence of Terms:** In the event that there is a conflict between the General Terms and Conditions and any Special Terms and Conditions used in this section, the Special Terms and Conditions shall apply.

- A. **Mandatory Use of Town Forms and Terms and Conditions:** Failure to submit a proposal accompanied by the signed and dated Cover Sheet provided shall be a cause for rejection of the proposal. Return of the complete document is required. Modification of or additions to any portion of the solicitation may be cause for rejection of the proposal; however, the Town of Vienna reserves the right to decide, on a case-by-case basis, in its sole discretion, whether or not such a proposal should be considered as non-responsive.

Offerors are reminded that changes to the RFP, in the form of addenda, are often issued between the issue date and within three business (3) days before the closing of the RFP. Offerors are solely responsible for checking the Town website to ensure that they have the most current information regarding the RFP.

All addenda must be signed and submitted with your bid.

- B. **Ownership of Material:** Ownership of all data, materials and documentation originated and prepared for the Town of Vienna pursuant to the RFP shall belong exclusively to the Town and be subject to public inspection in accordance with the Virginia Freedom of Information Act. Trade secrets and proprietary information submitted by an offeror shall not be subject to public disclosure under the Virginia Freedom of Information Act; however, the offeror must invoke the protections of this section prior to or upon submission of the data or other materials, and must identify the data or other materials to be protected and state the reasons why protection is necessary.
- C. **Default:** In case of failure to deliver services in accordance with the contract terms and conditions, the Town of Vienna, after due oral or written notice, may procure them from other sources and hold the Consultant responsible for any resulting additional purchase and administrative costs. This remedy shall be in addition to any other remedies which the Town of Vienna may have.
- D. **Obligation of Offeror:** By submitting a proposal, the offeror covenants and agrees that he has satisfied himself, from his own investigation of the conditions to be met, that he fully understands his obligation and that he will not make any claim for, or have right to cancellation or relief from the contract because of any misunderstanding or lack of information.
- E. **Withdrawal/Modification of Proposals:** Proposals may be withdrawn or modified by written notice received from offerors prior to the time fixed for proposal receipt.

## **RFP 12-06-- MAPLE AVENUE COMMERCIAL CORRIDOR ZONING UPDATE**

- F. Receipt and Opening of Proposals: In the case of proposals received in response to a Request for Proposals, public openings are not required; however, if a public opening is held, only the names of the offerors are read aloud.
- G. Qualifications of Offerors: The Town of Vienna may make such reasonable investigations as deemed proper and necessary to determine the ability of the offeror to perform the work, and the offeror shall furnish to the Town of Vienna all such information and data for this purpose as may be requested. The Town of Vienna reserves the right to inspect the offeror's physical facilities prior to award to satisfy questions regarding the offeror's capabilities. The Town of Vienna further reserves the right to reject any proposal if the evidence submitted by, or investigations of, such offeror fails to satisfy the Town that such offeror is properly qualified to carry out the obligations of the contract and to complete the work contemplated therein.
- H. Debarment Status: By submitting their proposals, all offerors certify that they are not currently debarred from submitting proposals on contracts by any agency of the Commonwealth of Virginia, nor are they an agent of any person or entity that is currently debarred from submitting proposals on contracts by any agency of the Commonwealth of Virginia.
- I. Cancellation of Contract: The Town of Vienna reserves the right to cancel and terminate any resulting contract, in part or in whole, without penalty upon ten (10) days written notice to the consultant. Any contract cancellation notice shall not relieve the consultant of the obligation to deliver and/or perform on all outstanding orders issued prior to the effective date of cancellation.
- J. Insurance: By signing and submitting a bid or proposal under this solicitation, the bidder or offeror certifies that if awarded the contract, it will have following insurance coverages at the time the work commences:

### **Insurance Coverages and Limits Required:**

1. Worker's Compensation – Statutory requirements and benefits.
2. Employers Liability - \$100,000.
3. Broad Form Comprehensive General Liability - \$1,000,000 Combined Single Limit coverage to include: Premises – Operations; Products/Completed Operations; Contractual; Independent Contractor's Liability; Owner's and Contractor's Protective Liability and Personal Injury Liability (Libel, Slander, Defamation of Character, etc.)
4. Automobile Liability - \$500,000 Combined Single Limit

Professional Liability/Errors and Omissions Coverage – Proof of professional liability coverage must accompany the Consultant's written proposal.

## **RFP 12-06- MAPLE AVENUE COMMERCIAL CORRIDOR ZONING UPDATE**

Additionally, it will maintain these, if available during the entire term of the contract and that all insurance coverages will be provided by insurance companies authorized to sell insurance in Virginia by the Virginia State Corporation Commission.

During the period of the contract, the Town reserves the right to require the consultant to furnish certificates of insurance for the coverage required.

**The Town of Vienna, Virginia is to be named as additional insured on the Comprehensive General Liability and Automobile Liability policies and this is to be so noted on applicable Certificates of Insurance. The Certificates shall be delivered to the Town of Vienna PRIOR to the commencement of any work.**

A thirty (30) day written notice of cancellation or non-renewal shall be furnished by certified mail to the purchasing office at the address indicated on the solicitation.

The proposer's signature on this solicitation constitutes certification that, if awarded the contract, their firm shall obtain the required coverage as specified herein within ten (10) days of notification of award.

- K. Special Provisions: The Firm retained by the Town of Vienna for professional services shall indemnify the Town of Vienna from damages caused by the negligent acts, errors, and omissions in the performance of the Firm's professional services. It is imperative that the Firm provide one main project representative for the duration of the contract to answer any questions that pertain to the design drawings, specifications, construction estimates, surveying cut sheets, and recommended modifications.

Design and/or study changes which are the fault of the Firm will be corrected at no additional cost to the Town of Vienna.

The Firm shall be responsible for updating budget and cost estimates of the project at appropriate intervals during planning and design.

- L. Rights of the Town of Vienna: The Town of Vienna further reserves the right to request information relative to experience, reference and/or financial status of a firm.

The Town of Vienna reserves the right to modify any standard AIA or other contract form. Refusal to negotiate such modifications in good faith by any firm submitting a proposal may be grounds for elimination from further consideration/evaluation.



**RFP 12-06- MAPLE AVENUE COMMERCIAL CORRIDOR ZONING UPDATE**

**9. REFERENCES**

MUST BE COMPLETED AND RETURNED WITH PROPOSAL

**NAME OF COMPANY**

**QUALIFICATION OF OFFEROR:** Offerors must have the capability and capacity in all respects to fully satisfy the contractual requirements. Indicate the length of time you have been in business providing this type of service and/or product; \_\_\_\_\_ Years, \_\_\_\_\_ Months. Provide a list of at least three (3) accounts, preferably governmental, that your firm has provided similar goods and/or services to in the past twelve (12) months. PLEASE TYPE.

**1. FIRM NAME -** \_\_\_\_\_

**ADDRESS -** \_\_\_\_\_

**CONTACT/TITLE -** \_\_\_\_\_

**PHONE NUMBER -** \_\_\_\_\_ **EMAIL-** \_\_\_\_\_

**PROJECT - (DATE SERVICES/GOODS PROVIDED WITH BRIEF DESCRIPTION OF PROJECT)-**

\_\_\_\_\_  
\_\_\_\_\_

**2. FIRM NAME -** \_\_\_\_\_

**ADDRESS -** \_\_\_\_\_

**CONTACT/TITLE -** \_\_\_\_\_

**PHONE NUMBER -** \_\_\_\_\_ **EMAIL-** \_\_\_\_\_

**PROJECT - (DATE SERVICES/GOODS PROVIDED WITH BRIEF DESCRIPTION OF PROJECT)-**

\_\_\_\_\_  
\_\_\_\_\_

**3. FIRM NAME -** \_\_\_\_\_

**ADDRESS -** \_\_\_\_\_

**CONTACT/TITLE -** \_\_\_\_\_

**PHONE NUMBER -** \_\_\_\_\_ **EMAIL -** \_\_\_\_\_

**PROJECT - (DATE SERVICES/GOODS PROVIDED WITH BRIEF DESCRIPTION OF PROJECT)-**

\_\_\_\_\_

## RFP 12-06- MAPLE AVENUE COMMERCIAL CORRIDOR ZONING UPDATE

### SECTION 10. GENERAL TERMS AND CONDITIONS

**VENDOR:** THE GENERAL TERMS AND CONDITIONS WHICH FOLLOW APPLY TO ALL PURCHASES AND BECOME A DEFINITE PART OF EACH FORMAL INVITATION FOR BID, REQUEST FOR PROPOSALS, PURCHASE ORDER AND/OR OTHER AWARD ISSUED BY THE TOWN OF VIENNA, VIRGINIA, UNLESS OTHERWISE SPECIFIED IN THE SOLICITATION DOCUMENTS. BIDDERS/OFFERORS OR THEIR AUTHORIZED REPRESENTATIVES ARE EXPECTED TO FULLY INFORM THEMSELVES AS TO THE CONDITIONS, REQUIREMENTS, AND SPECIFICATIONS BEFORE SUBMITTING BIDS/PROPOSALS; FAILURE TO DO SO WILL BE AT THE BIDDERS/OFFERORS' OWN RISK AND HE CANNOT SECURE RELIEF ON THE PLEA OF ERROR.

SUBJECT TO STATE, COUNTY AND LOCAL LAWS AND ALL RULES, REGULATIONS AND LIMITATIONS IMPOSED BY LEGISLATION OF THE FEDERAL GOVERNMENT, BIDS/PROPOSALS ON ALL SOLICITATIONS ISSUED BY THE PURCHASING OFFICE WILL BIND BIDDERS/OFFERORS TO APPLICABLE CONDITIONS AND REQUIREMENTS HEREIN SET FORTH UNLESS OTHERWISE SPECIFIED IN THE SOLICITATION.

1. **CLARIFICATION OF TERMS:** If any prospective bidder/offeree has questions about the specifications or other solicitation documents, the prospective bidder/offeree should contact the Purchasing Agent or the person whose name appears on the face of solicitation NO LATER THAN SEVEN (7) WORKING DAYS BEFORE opening/closing date. Any revisions to the solicitation will be made only by addendum issued by the Purchasing Agent.
2. **PREPARATION & SUBMISSION:** In order to be considered for selection, the bidder/offeree must submit a complete response to the Invitation For Bid/Request For Proposals. One (1) original and one (1) copy of each bid/proposal must be submitted on the Town of Vienna Bid/Proposal Forms provided. The bid/proposal shall be signed by an authorized representative of the bidders'/offerors' firm and delivered to the proper location by the time and date specified on the cover page.
3. **ENVELOPE IDENTIFICATION:** The signed bids must be returned in a sealed envelope and identified as follows: "SEALED BID", show the IFB number, IFB subject, opening time, opening date, and bidder's name and address. In the case of proposals, the signed proposal cover page and proposal must be returned in a sealed envelope, marked clearly on the outside "SEALED COMPETITIVE NEGOTIATION", show the RFP number, RFP subject, closing time, closing date, and offeror's name and address.

If a bid/proposal is mailed in an envelope, not identified as specified, the bidder/offeree takes the risk that the envelope may be inadvertently opened and the information compromised which may cause the bid/proposal to be disqualified. The Town reserves the right to declare such a bid/proposal as non-responsive. Bids/proposals may be hand delivered to the designated location.
4. **LATE BIDS/PROPOSALS:** LATE bids/proposals will be returned to bidder/offeree UNOPENED, if the IFB/RFP number and return address is shown on the envelope.
5. **QUOTATIONS TO BE F.O.B. DESTINATION:** Quote F.O.B. DESTINATION for all competitive sealed bids. If otherwise, show exact cost to deliver.
6. **PRICING ERRORS:** In case of an error in price extension, the firm fixed unit price shall govern.
7. **BID/PROPOSAL ACCEPTANCE PERIOD:** Bids shall be binding upon the bidder for sixty (60) days following the bid opening date. Proposals shall be binding upon the offeror for ninety (90) days following the proposal due date. Any bid/proposal on which the bidder/offeree shortens the acceptance period may be rejected.

8. **CORRECTION OR WITHDRAWAL OF BIDS AND CANCELLATION OF AWARDS UNDER COMPETITIVE SEALED BIDDING:** Correction or withdrawal of inadvertently erroneous bids before or after award, or cancellation of awards or contracts based on such bid mistakes, shall be permitted. After bid opening, no changes in bid prices or other provisions of bids prejudicial to the interest of the Town or fair competition shall be permitted. Except as otherwise provided by regulation, all decisions to permit the correction or withdrawal of bids, or to cancel awards or contracts based on bid mistakes, shall be supported by a written determination made by the Purchasing Agent. No bid may be withdrawn when the result would be to award the contract on another bid of the same bidder or of another bidder in which the ownership of the withdrawing bidder is more than five percent (5%). If a bid is withdrawn, the lowest remaining bid shall be deemed to be the low bid. If the Purchasing Agent, the Using Department, or a designee of such, denies the withdrawal of a bid, he shall notify the bidder in writing stating his decision.
9. **TAX EXEMPTION:** The Town of Vienna is exempt from State Sales Tax and Federal Excise Tax. The Town's Federal Tax ID Number is 54-6001654. DO NOT INCLUDE TAX IN BID. Tax Exemption Certificate furnished by the Town of Vienna on request.
10. **USE OF BRAND NAME OR EQUAL:** Unless otherwise provided in the solicitation, the name of a certain brand, make or manufacturer does not restrict bidders/offerees to the specific brand, make or manufacturer named, but conveys the general style, type, character, and quality of the article desired. Any article which the Town of Vienna, in its sole discretion, determines to be equal to that specified, considering quality, workmanship, economy of operation, and suitability for the purpose intended, shall be accepted. The bidder/offeree is responsible to clearly and specifically indicate the product being offered and to provide sufficient descriptive literature, catalogs and technical details to enable the Town of Vienna to determine if the product offered meets the requirements of the solicitation. This is required even if offering the exact brand, make or manufacturer specified. Normally in competitive sealed bidding only the information furnished with the bid will be considered in the evaluation. Failure to furnish adequate data for evaluation purposes may result in declaring a bid non-responsive. Unless the bidder/offeree clearly indicates in its bid/proposal that the product offered is an "EQUAL" product, such bid/proposal will be considered to offer the brand name product referenced in the solicitation.
11. **SAMPLES:** Samples, if required, must be furnished free of expense to the Town of Vienna on or before date specified; if not destroyed in examination, they will be returned to bidder, if requested, at his expense. Each sample must be marked with the bidder's name and address, Town's request number and opening date. DO NOT ENCLOSE IN OR ATTACH BID TO SAMPLE.
12. **DELIVERY:** Bids must show number of days required to place material in using agency's receiving area under normal conditions. Proposal must show the number of days required to provide the services/reports as specified.

Failure to state delivery time obligates bidder/offeree to complete delivery in fourteen (14) calendar days or as specified. A five (5) day difference in delivery promise may break a tie bid. An unrealistically short or long delivery promise may cause a bid/offer to be disregarded. Consistent failure to meet delivery promise without valid reason may cause removal from bid list. Delivery shall be made during normal working hours, 8:00 am to 4:30 pm Monday through Friday, unless prior approval for another time period has been obtained from Consignee.
13. **DEFAULT:** In case of failure to deliver goods/services in accordance with the contractual terms and conditions, the Town of Vienna, Virginia, after due oral or written notice, may procure them from other sources and hold the defaulting Contractor responsible for any resulting additional purchase and administrative costs. This remedy shall be in addition to any other remedies which the Town of Vienna may have.

## RFP 12-06- MAPLE AVENUE COMMERCIAL CORRIDOR ZONING UPDATE

14. **CONDITION OF ITEMS:** All items bid/proposed shall be new and in first class condition, including containers suitable for shipments and storage, unless otherwise indicated in bid invitation/proposal request. Verbal agreements to the contrary will not be recognized.
15. **SUBSTITUTIONS:** No substitutions or cancellations permitted without prior written approval by the Purchasing Agent.
16. **RIGHTS OF THE TOWN OF VIENNA:** The Town reserves the right to accept or reject all or any part of bids/proposals, waive minor technicalities/informalities and award the contract to the lowest responsive and responsible bidder or most qualified and best suited offeror to best serve the interest of the Town.
17. **ANTI-TRUST:** By entering into a contract, the bidder/offeror conveys, sells, assigns, and transfers to the Town of Vienna all rights, title and interest in and to all causes of the action it may now have or hereafter acquire under the antitrust laws of the United States and the Commonwealth of Virginia, relating to the particular goods or services purchased or acquired by the Town of Vienna under said contract. Consistent and continued tie bidding could cause rejection of bids by the Purchasing Agent and/or investigation for Anti-Trust violations.
18. **INDEMNIFICATION:** The Contractor agrees to indemnify, defend and hold harmless the Town of Vienna, Virginia, its officers, agents, and employees from any claim, damages and actions of any kind or nature, whether at law or in equity, arising from or caused by the use of any materials, goods, or equipment of any kind or nature furnished by the contractor or any services of any kind or nature furnished by the contractor, provided that such liability is not attributable to the sole negligence of the using department or to failure of the using department to use the materials, goods or equipment in the manner already and permanently described by the contractor on the materials, goods or equipment delivered. The vendor agrees to protect the Town from claims involving infringement of patent or copyrights.
19. **TIE BIDS:** If there is a tie for low bid and all other considerations are equal, and if the public interest will not permit the delay of re-advertising for bids, the award shall be determined by drawing lots in public.
20. **PROHIBITION AS SUBCONTRACTORS UNDER COMPETITIVE SEALED BIDDING:** No bidder who is permitted to withdraw a bid shall, for compensation, supply any material or labor to or perform any subcontract or other work agreement for the person or firm to whom the contract is awarded or otherwise benefit, directly or indirectly, from the performance of the project for which the withdrawn bid was submitted.
21. **ASSIGNMENT OF CONTRACT:** A contract shall not be assignable by the Contractor, in whole or in part, without the prior written consent of the Town of Vienna, Virginia.
22. **CONTRACT DOCUMENTS:** The contract entered into by the parties shall consist of the Invitation For Bid/Request For Proposal, the signed bid/proposal submitted by the Contractor, the Town of Vienna's standard Purchase Order, the Mandatory/Special Specifications, Terms and Conditions, and the General Terms and Conditions, all of which shall be referred to collectively as the Contract Documents.

If the contractor has a standard contract form, this form shall be submitted with the bid/proposal submittal for the Town's review of its terms and conditions.
23. **LICENSE REQUIREMENT:** All firms doing business in the Town of Vienna are required to be organized or authorized to transact business in the Commonwealth of Virginia or include in its bid or proposal a statement describing why the bidder or offeror is not required to be so authorized. Additionally all firms doing business in the Town of Vienna are required to be licensed in accordance with the Town's "Business, Professional and Occupational Licensing (BPOL) Tax" Ordinance. Wholesale and retail merchants without a business location in the Town are exempt from this requirement. Questions concerning the BPOL Tax should be directed to

the Finance Department, Business License Office, Telephone number (703) 255-6321. The BPOL License number must be indicated on the submitted bid form.

24. **AWARD:** The contract shall be awarded to the lowest responsive and responsible bidder or the most qualified and best suited offeror.

The Town Council will award all contracts in the amount of ten thousand dollars (\$10,000.00) or more.

The Purchasing Agent will award all contracts less than ten-thousand dollars (\$10,000.00).

The Purchasing Agent shall sign all contract documents, with the exception of "Construction" contracts, and issue a purchase order to the successful bidder/offeror.

25. **METHOD OF PAYMENT:** Upon satisfactory delivery of the merchandise and/or satisfactory completion of the services, all invoices and statements shall reference the purchase order number and be submitted to:

Town of Vienna  
ATTN: ACCOUNTS PAYABLE  
127 Center St., S.  
Vienna, VA 22180.

The prices and payments shall be full compensation for the labor, tools, equipment, transportation and all other incidentals necessary to complete the specified terms and conditions.

26. **ANTI-DISCRIMINATION:** By submitting their bids/proposals all bidders/offerors certify to the Town of Vienna that they will conform to the provisions of the Federal Civil Rights Act of 1964, as amended, where applicable, and Section 2.2-4311 of the Virginia Public Procurement Act which provides:

In every contract over \$10,000.00 the provisions in A and B below apply:

- a. During the performance of this contract, the contractor agrees as follows:

The Contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex or national origin except where religion, sex or national origin is a bona fide occupational qualification reasonably necessary to the normal operation of the contractor. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.

The Contractor, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, will state that such Contractor, is an equal opportunity employer.

Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section.

- b. The Contractor will include the provisions of the foregoing paragraphs in every subcontract or purchase order of over \$10,000.00, so that the provisions will be binding upon each subcontractor or vendor.

27. **ETHICS IN PUBLIC CONTRACTING:** The provisions contained in Sections 2.2-4367 through 2.2-4377 of the Virginia Public Procurement Act as set forth in the Code of Virginia (1950), as amended, shall be applicable to all contracts solicited or entered into by the Town of Vienna. A copy of these provisions may be obtained from the Purchasing Agent upon written request.

By submitting their bids/proposals, all bidders/offerors certify that their bids/proposals are made without collusion or fraud and that they have not offered or received any kickbacks or inducements from any other

## RFP 12-06- MAPLE AVENUE COMMERCIAL CORRIDOR ZONING UPDATE

bidder/offeree, supplier, manufacturer or subcontractor in connection with their bid/proposal, and that they have not conferred on any public employee having official responsibility for this procurement transaction any payment, loan, subscription, advance, deposit of money, services or anything of more than nominal value, present or promised unless consideration of substantially equal or greater value was exchanged.

28. **CRIMINAL SANCTIONS:** The provisions referenced in Item 27 supplement, but do not supersede, other provisions of law including, but not limited to, the State and Local Government Conflict of Interests Act (§§ 2.2-3100 et seq.), the Virginia Governmental Frauds Act (§§ 18.2-498.1 et seq.), and Articles 2 (§§ 18.2-438 et seq.) and 3 (§§ 18.2-446 et seq.) of Chapter 10 of Title 18.2. The provisions apply notwithstanding the fact that the conduct described may not constitute a violation of the State and Local Government Conflict of Interests Act.
29. **APPLICABLE LAW AND COURTS:** Any contract resulting from this solicitation shall be governed in all respects by the laws of the Commonwealth of Virginia and any litigation with respect thereto shall be brought in the courts of the Commonwealth. The Contractor shall comply with applicable federal, state and local laws and regulations.
30. **LABELING OF HAZARDOUS SUBSTANCES:** If the items or products requested by this solicitation are "Hazardous Substances" as defined by 10.1-1400 of the Code of Virginia (1950), as amended, 42 U.S.C. § 11001 et seq., or 42 U.S.C. § 9601 et seq., then the bidder/offeree, by submitting his bid/proposal, certifies and warrants that the items or products to be delivered under this contract shall be properly labeled as required by the foregoing sections and that by delivering the items or products that the bidder/offeree does not violate any of the prohibitions of Sec. 10.1-1400 et seq., or the Code of Virginia or Title 15 U.S.C. Sec. 1263.
31. **MATERIAL SAFETY DATA SHEETS:** Material Safety Data Sheets (MSDS) and descriptive literature shall be provided with the bid/proposal or delivered materials for each chemical and/or compound offered. Failure of the bidder/offeree to submit such data sheets may be cause for declaring the bid/proposal as non-responsive.
32. **DEBARMENT STATUS:** By submitting their bids, Bidders certify that they are not currently debarred by the Commonwealth of Virginia or any Political Subdivision from submitting bids on contracts for the type of services covered by this solicitation, nor are they an agent of any person or entity that is currently so debarred.
33. **COOPERATIVE PROCUREMENT:** As authorized in Section 2.2-4304 of the Code of Virginia this procurement is being conducted on behalf of and may be used by public bodies, agencies, institutions and localities of the several states, territories of the United States, and the District of Columbia with the consent of the Contractor.

TOWN OF VIENNA  
TOWN COUNCIL WORKSESSION ITEM  
December 12, 2011  
8:00 PM



ITEM NO. 4

Capital Improvements Plan Update: Projects and Financing

**BACKGROUND SUMMARY:**

The projects financed by the last bond issue (2010) were part of the Capital Improvements Plan (CIP) formulated in 2009. The 2009 CIP also included projects to be financed by 4 additional debt issues between 2010 and 2020. It assumed continuation of the Town's practice of issuing debt in increments of less than \$5 million for 15 year terms, with debt being retired exclusively with a combination of meals and lodging taxes and transfers from the water and sewer fund.

**OVERVIEW:**

During the past several months, the 2009 CIP has been evolving into what we'll label the draft 2012 CIP. Essentially it picks up the previous CIP's proposed projects and adds additional ones being proposed by staff. At the work session, Council will be provided with a list of proposed projects that are prioritized in debt issue order. Financing options will preface presentation of the proposed projects to provide a framework of various funding options.

**SUMMARY/STAFF IMPRESSIONS:**

Presentations are intended to give Council an overview of the Town's long-term capital needs and funding options.

**DOCUMENTS ATTACHED:**

No Attachments Available

**RECOMMENDATION:**

1. Council concurrence on project funded in the next debt issue, timing of the issue, and project priorities and financing for future debt issues.

TOWN OF VIENNA  
TOWN COUNCIL WORKSESSION ITEM  
December 12, 2011  
8:00 PM

 Print

ITEM NO. 5

Known Drainage Problems & Flooding Areas

**BACKGROUND SUMMARY:**

Drainage study recommendations for known drainage problems and flooding areas.

**OVERVIEW:**

The heavy rains this the past summer generated drainage and flooding complaints at various locations throughout the Vienna. Town Council has asked for a comprehensive report with specific recommendations. The problem locations are shown on the attached Drainage Problem Location Map.

There are two locations in particular that have been discussed by Council in the past, and these locations experienced severe flooding this summer. The locations are:

1. Nutley Street/Marshall Road S.W. behind 717 Marshall Road S.W.
2. Meadow Lane and Gibson Drive S.W.

In 2008, at Council's direction, the Department of Public Works (DPW) hired Tri-Tek Engineering to prepare comprehensive drainage studies for these two locations to assess the condition and capacity of the existing storm drain infrastructure. Both studies identified that the storm drains built 40-50 years ago are below capacity based on current design standards.

DPW has created a Drainage Study Recommendations Matrix, which is attached, that compares various possible improvement options for both of these locations for Council consideration.

Besides these two locations, other drainage problem locations were compiled by both citizen's complaints and DPW staff observations. These locations are included on the Drainage Problem Location Map as well:

3. Maple Avenue and Center Street, N. (near Starbucks)
4. Maple Avenue and Church Street, N.E.
5. Ninovan Road and Talahi Road, S.E.
6. Nutley Street and Maple Avenue W. (Village Green Shopping Center)
7. Nutley Street and Kingsley Road, S.W.
8. Ross Drive, S.W. at Southside Park
9. Walker Street, S.W. at Bear Branch Creek
10. James Drive, S.W. at Stream Valley Park Creek






Some of these locations require comprehensive drainage studies to determine the exact problem and identify a solution. Others require simple infrastructure repair as summarized in the attached Drainage Study Recommendations Matrix document.

**SUMMARY/STAFF IMPRESSIONS:**

The gradual land development and re-development in Vienna over the past 50 years is creating an increase in runoff that is creating storm drainage problems during large storm events. The stormwater detention requirements for new subdivision helps, but in general there is more storm water flow. In addition, the aging stormwater system is showing its age with increased maintenance required.

**DOCUMENTS ATTACHED:**

1. [!\[\]\(2810827b83541c0dce997fe5e3a41ea5\_img.jpg\) Drainage Study Recommendations Matrix.pdf](#)
2. [!\[\]\(9b38fd330684f8274547a99fb73352cf\_img.jpg\) Drainage Problem Location Map.pdf](#)
3. [!\[\]\(0e0f5523781a9e5967475c3609d00882\_img.jpg\) 1-Nutley-Marshall TriTek Analysis.pdf](#)
4. [!\[\]\(b70288cd2671ab1c9d6c7c30be7a476b\_img.jpg\) 2-Meadow Lane TriTek Analysis Pictures.pdf](#)
5. [!\[\]\(c5b8ca647f94a4899f7e54a10eab3d55\_img.jpg\) 5-Drainage issue on Ninovan Rd.pdf](#)
6. [!\[\]\(b9786615974b289fe23516830d3fe191\_img.jpg\) 6-Storm Drain at Village Green Shopping Center.pdf](#)
7. [!\[\]\(25e6e07c047910123181a2016cb3340c\_img.jpg\) 7-Nutley-Kingsley Hunters Branch outfall.pdf](#)
8. [!\[\]\(eeedd59286dc2aa1969df3bd0ee75388\_img.jpg\) 8-Ross Drive SW Culvert-1.pdf](#)
9. [!\[\]\(40bbf0e0d2b3ed9c724ff39225e0b1aa\_img.jpg\) 8-Ross Drive SW Culvert-2.pdf](#)

10.  [8-Ross Drive SW Culvert-3.pdf](#)
11.  [8-Ross Drive SW Culvert-4.pdf](#)
12.  [9-Outfall behind 500 Walker Street SW 1.pdf](#)
13.  [9-Outfall behind 500 Walker Street SW 2.pdf](#)
14.  [10-Outfall behind 111 James Drive SW.pdf](#)

RECOMMENDATION:

It is recommended that Town Council consider a steady CIP funding stream to allow the Department of Public Works to begin systematically studying and repairing problems.



## Drainage Study Recommendations November 11, 2011

### Nutley Street / Marshal Road S.W. -- tributary of Bear Branch

#### Background Summary:

A heavy rainfall event this past summer has created complaints of flooding at the culvert under Nutley Street S.W. from citizens at 717 and 715 Marshall Road S.W. and from 1001 Delilah Drive S.W. The culvert consists of 3-36" concrete pipes which are located within an existing floodplain and storm drainage easement in the rear yard of the 717 Marshall Road S.W. and is close to the Nutley Street S.W. and Marshall Road S.W. intersection. Citizens have complained in the past about flooding and have reported that approximately every 5 years a significant rainfall will cause water back up in front of the culvert and flood basements.

In November 2008 a drainage study and culvert analysis was prepared by Tri-Tek Engineering at the direction of the Town Council and the Department of Public Works. The study concluded that at the time Nutley Street S.W. culvert was built (1963) it had most likely met the design standards of the time. It should also be noted that the subject homes were built after the Nutley Street S.W. culvert was built. In comparison to today's standards, the existing culvert is undersized and has no overland relief when the culvert capacity is exceeded. Below is a list of possible options to consider.

Option	Pros	Cons	Cost
Do nothing	-No Cost - No construction disruption to private property	-Does not address citizen concerns -Properties will experience periodic flooding when a 10-year storm exceeds pipe capacity	\$0
Waterproof effected homes by sealing off critical windows and doors or building floodwalls / earthen berms	- Protects personal property	- does not improve the public infrastructure - significant disruption to private properties	+/- \$50,000-\$100,000
At 701 Marshal Road SW: close off basement entry and re-grade yard	<i>-This has already been implemented by the owner of 701 Marshal Road SW</i>	- does not address greater concern of sub-standard culvert, or concerns of adjacent citizens	\$0
Add additional 36" Culvert under Nutley Street SW	-Would bring the culvert system up to current VDOT design standard (25-year storm event ) During 25-year storm event rainfall the level of water behind the culvert will reduce as much as one foot from current condition.	-High water levels during large storm events would be probable, though should be lessened. -Construction would have severe impact to traffic on and around Nutley Street SW.	+/- \$200,000 (design and construction based on engineer's estimate)





**Drainage Study Recommendations  
November 11, 2011**

**Nutley Street / Marshal Road S.W. -- tributary of Bear Branch Continued**

<b>Option</b>	<b>Pros</b>	<b>Cons</b>	<b>Cost</b>
Replace existing culvert system with open arch Con/Span bridge system.	<ul style="list-style-type: none"><li>-Would significantly increase drainage capacity</li><li>Would reduce the occurrence pooling water behind Nutley Street SW</li><li>-Would create the opportunity to possibly lower the elevation of the culvert.</li></ul>	<ul style="list-style-type: none"><li>-Construction would have severe impact to traffic on and around Nutley Street SW.</li></ul>	\$500,000+ (design and construction)
Offer to purchase effected properties and demolish homes	<ul style="list-style-type: none"><li>-Would eliminate flooding of homes</li><li>-Would create opportunity for park land / open space</li></ul>	<ul style="list-style-type: none"><li>- does not address greater concern of sub-standard culvert, or concerns of adjacent citizens</li></ul>	+/- \$650,000 per property (based on 2010 Fairfax County Real Estate Assessment average values)



## Drainage Study Recommendations November 11, 2011

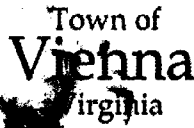
### Meadow Lane / Gibson Drive S.W.

#### Background Summary:

A heavy rainfall event this past summer has created complaints of flooding on the properties of 615 and 701 Meadow Lane S.W. The subject properties are located at a low point of the road and during heavy rain events the storm drain system capacity is exceeded and backs onto the street and front yards. During exceptionally heavy rain events the flood water gets high enough to flood homes.

In November 2008 a drainage study and storm drain analysis was prepared by Tri-Tek Engineering at the direction of Town Council and the Department of Public Works. The report concluded that the storm drain system in Meadow Lane S.W. is undersized for the design 10-year storm and there is insufficient over-land relief between homes at 615 and 701 Meadow Lane S.W. The existing pipes are located either within public property or within existing storm drain easements. Below is a list of possible options to consider.

Option	Pros	Cons	Cost
Do nothing	<ul style="list-style-type: none"><li>-No Cost</li><li>- No construction disruption to private property</li></ul>	<ul style="list-style-type: none"><li>-Meadow Lane SW and surrounding properties will continue to experience periodic flooding when a 3-year storm (or greater) exceeds pipe capacity</li></ul>	\$0
Grade the yards between the houses at 615, 701 and 703 Meadow Lane SW to provide adequate over-land relief. Move this option up	<ul style="list-style-type: none"><li>- Would significantly reduce the likelihood of the structures flooding during heavy rains even if the pipe capacities are exceeded</li></ul>	<ul style="list-style-type: none"><li>-Would have significant impact to private properties</li><li>-Would require permissions / easements from property owners</li><li>-only partially addresses the concerns of flooding and does not address the inadequate storm drains.</li></ul>	+/- \$50,000 (rough estimate)
Increase size of pipes and add additional curb inlets at critical areas	<ul style="list-style-type: none"><li>-Would meet or exceed current design standards</li><li>-Would reduce the frequency of flooding on Meadow Lane SW</li></ul>	<ul style="list-style-type: none"><li>-Would have significant impact to private properties</li><li>-May require permissions / additional easements from property owners</li><li>-Potential for flooding of structures during heavy rains may still exist since there is inadequate overland relief between houses.</li></ul>	+/- \$350,000 (design and construction)



## **Drainage Study Recommendations November 11, 2011**

### **Additional Areas of Drainage Concerns Recommended for Engineering Survey & Evaluation**

The following areas have drainage problems, which are compiled from complaints received and/or observed by Town staff:

- Public storm drain through Village Green Shopping Center (at Nutley Road N.W. & Maple Ave W.) water surges out of manhole and floods stores (see attached documentation)
- Maple Ave and Center Street N. (near Starbucks) private parking lot floods
- Failing Town storm drain pipe under WO&D Trail between Maple Ave W. and Church Street N.E.
- Ninovan and Talahi Roads S.E. large volume of water from street and adjacent properties flows between homes (see attached documentation from citizen complaints)

The following are areas that should be repaired if the funds are available, no study required. These are estimated to cost approximately \$450,000 combined:

- Failed storm drain into Hunters Branch off Nutley Street S.W. across from Kingsley Road SW (see attached photo)
- Failing culvert wing wall at Ross Drive SW and Southside Park. (see attached photo)
- Failed outfall and sinkhole behind Walker Street SW into Bear Branch (see attached photo)
- Failed outfall behind James Drive SW into Stream Valley Park creek (see attached photos)

#### **Recommendation:**

DPW recommends funds from the Capital Improvement Program to create a priority list of storm drain improvements and planning to fund the necessary analyses, design and implementation of recommended improvements throughout the Town.



## Known Drainage Problems and Flooding Areas – Location Map

1. Nutley Street and Marshall Road, SW
2. Meadow Lane and Gibson Drive, SW
3. Maple Avenue and Center Street, N (near Starbucks)
4. Maple Avenue and Church Street, NE
5. Ninovan Road and Talahi Road, SE
6. Nutley Street and Maple Avenue W. (Village Green Shopping Center)
7. Nutley Street and Kingsley Road, SW
8. Ross Drive, SW at Southside Park
9. Walker Street, SW at Bear Branch Creek
10. James Drive, SW at Stream Valley Park Creek



## **I. Introduction**

The project is intended to evaluate the capacity of the existing culvert crossing Nutley Street S.W., at the Marshall Road S.W., intersection. The evaluation was requested to assist the Town in responding to resident's concerns regarding basement flooding at 717 Marshall Street. The hydrologic conditions of the drainage shed were analyzed and compared against the as-built capacity of the culverts. Tasks performed as part of this project thus included:

- A. Acquire topography, storm sewer and soils maps for the area.
- B. Analyze maps to determine the effective drainage area.
- C. Determine predominant land cover conditions.
- D. Determine CN for the drainage area, model and compute runoff "Q" for 2, 10, 25, 50 and 100 year frequencies.
- E. Survey culvert, size, slope and entrance/exit conditions.
- F. Determine road classification and recommended VDOT culvert capacity criteria.
- G. Analyze culvert capacity (inlet control conditions). Evaluate field conditions to see if tail water may impact the analysis criteria.
- H. Prepare report of findings.

## **II. Description of Drainage Shed**

The drainage shed area of 70.29 Acres was derived from 2008 Fairfax County Contour Maps on Map grids 38-4 and 48-2 as shown in Appendix A. The existing roads and existing inlets were taken into consideration when deriving the contributing drainage area. Appendix A illustrates the ground surface elevation with contour lines that join points of equal elevation. Appendix A also illustrates other property map information such as lot lines, road right-of-way, etc. The contour interval is 5 feet. The date of the photography used to determine the ground elevation is 1997.

The soils information for the drainage shed was based on the Natural Resources Conservation Service National Cooperative Soil Survey as shown in Appendix B. According to the NRCS Web Soil Survey 2.0, 98.8% of the soils within the drainage shed are D soils. The "Description & Interpretive Guide to NRCS Mapped Soils in Fairfax County," describes D soils as having a slow infiltration rate, due to shallow impermeable layer of bedrock or a permanent high water table near the surface, and therefore has a high runoff potential.

The land cover conditions of the drainage shed affects stormwater flow calculations. The drainage shed consists of 58.62 acres of ¼ acre residential lots. There are approximately 7.82 acres of open space and 13.85 acres of impervious area located at the Vienna Aquatic Club and Vienna Baptist Church.

The calculation of the runoff time of concentration entails three components: 1) sheet flow, 2) shallow concentration, and 3) channel flow. This drainage shed had approximately 100' sheet flow along the North East corner. Approximately 200' of shallow concentrated flow existed until the stormwater reached the existing piped and channelized storm conveyance system. After flowing through about 900 feet of piped storm system the stormwater runoff reached an existing channel, which it followed until it reached the culverts at the intersection of Nutley and Marshall.

### III. Description of the Area of Concern

The residential dwelling at 717 Marshall has a channel serving a 70.29 acre drainage shed located on the north side of the property. Appendix C shows the topographic survey of the areas of concern. The channel flows to three 36" Culverts which are located on the northwest corner of the property. According to the residents, the basement of the house often floods during large storm events. The topographic map Appendix D indicates that when the storm water rises over the existing sidewalk at elevation 331.6 the basement will flood. The basement floor of the residential dwelling is at 327.87 and the first floor elevation is at 335.75.

As shown in Appendix D the three existing 36" culverts on the northwest corner of the property have an average upstream invert elevation of 327.70. The slope of the culverts is about two percent.

### IV. Hydrologic/Hydraulic Analyses

The Rational Method is recommended by VDOT for estimating the design storm peak runoff for drainage areas as large as 200 acres. Our hydrologic model is based on the VDOT Drainage Manual Chapter 6.4.4.1 Rational Method.

According to the VDOT Drainage Manual Chapter 6.4.4.1.4 the rational formula estimates the peak rate of runoff at any location in a watershed as a function of the drainage area, runoff coefficient, and mean rainfall intensity for a duration equal to the time of concentration (the time required for water to flow from the most hydraulically remote point of the basin to the location being analyzed).

The Rational Method Formula is expressed as follows:

$$Q = C_f * C * I * A$$

Where:

Q = Maximum rate of runoff, cubic feet per second (cfs)

C<sub>f</sub> = Saturation factor

C = Runoff coefficient representing a ratio of runoff to rainfall (dimensionless)

i = Average rainfall intensity for a duration equal to the time of concentration for a selected return period, inches per hour (in/hr)

A = Drainage area contributing to the design location, acres (ac)

In Chapter 6.4.4.1.5 Infrequent Storm of the VDOT Drainage Manual, the coefficients given in Table 6-2 are for storms with less than a 10-year recurrence interval. Less frequent, higher intensity storms will require modification of the coefficient because infiltration and other losses have a proportionally smaller effect on runoff (Wright-McLaughlin 1969). The adjustment of the Rational Method for use with larger storms can be made by multiplying the right side of the Rational Formula by a saturation factor, C<sub>f</sub>. The product of C<sub>f</sub> and C should not be greater than 1.0. Table 6-2 lists the saturation factors for the Rational Method.

VDOT Drainage Manual, Table 6-2. Saturation Factors for Rational Formula

Recurrence Interval (Years)	Cf
2, 5, and 10	1.0
25	1.1
50	1.2
100	1.25

VDOT Drainage Manual, 6.4.4.1.6 *Time of Concentration*

The time of concentration is the time required for water to flow from the hydraulically most remote point in the drainage area to the point under investigation. The Time of concentration (tc) for the drainage area will be comprised of overland flow (OLF), channel flow, and conveyance flow in pipes. The time of concentration is used to calculate the intensity (I).

VDOT Drainage Manual, *Overland Flow Seelye Method*

VDOT experience has determined that the Overland Flow Time nomograph developed by E.E. Seelye normally provides a realistic estimate of overland flow (OLF) time when properly applied within the limits shown on the nomograph. Refer to Appendix E for the Seelye chart. The Seelye method is the preferred VDOT method for computing overland flow. The overland flow for this project was estimated to be 100'.

VDOT Drainage Manual, *Channel Flow*

For channel flow or concentrated flow (CF) time VDOT has found that the nomograph entitled, "Time of Concentration of Small Drainage Basins" developed by P.Z. Kirpich provides a reasonable time estimate. Refer to Appendix E for the Kirpich nomograph. The calculations for the Time of Concentration can be found in Table 1.

Time of Concentration		
<b>(A-B) Sheet Flow</b>		
Drop =	2.5	ft
Length =	100	ft
N =	0.015	
Slope =	1.50%	
Tc =	0.149	hrs
<b>(B-C) Shallow Concentrated unpaved</b>		
Drop =	25.7	ft
Length =	530	ft
Slope =	4.80%	
Tc =	0.042	hrs
<b>(C-D) Shallow Concentrated paved</b>		
Drop =	2.3	ft
Length =	230	ft
Slope =	1.00%	
Tc =	0.01	hrs
<b>(D-E) Storm Pipe Flow</b>		
C =	0.56	
I =	5.75	
A =	12.41	Acres

Q =	40	cfs
S =	2.50%	
L =	405.3	
Velocity	13	fps
Tc =	0.02	hrs
<b>(E-F) Channel Flow (Based on Flowmaster)</b>		
L =	1675.00	ft
S =	0.02	
Velocity	4.70	ft/sec
Tc =	0.10	
Time of concentrations = 20 minutes		

Table 1

Time of concentrations = 20 minutes

VDOT Drainage Manual, HDA 05-03

B, D, & E factors are used to determine rainfall intensity in the Rational and Modified Rational Methods (based on NOAA NW-14 Atlas data). The intensity values for this study can be found in the Table 2. VDOT's Adoption & Implementation of NOAA Atlas 14 Rainfall Precipitation Frequency Data, HDA 05-03 can be found in Appendix F.

**B, D, E Factors (FAIRFAX COUNTY)**

Equation  $I_r = B/(T_c + D)^E$

Time of Concentration ( $T_c$ ) = 20.00 minutes

Rainfall Intensity	B	D	E	$I_r$
2 YR	55.09	11.50	0.84	3.04
10 YR	47.70	9.50	0.73	4.03
25 YR	39.18	7.25	0.65	4.57
50 YR	36.34	6.50	0.60	5.09
100 YR	32.29	5.00	0.55	5.50

Table 2

VDOT Drainage Manual, 6.4.4.1.7 *Runoff Coefficients*

The runoff coefficient (C) is a variable of the Rational Method that requires significant judgment and understanding on the part of the designer. The coefficient must account for all the factors affecting the relation of peak flow to average rainfall intensity other than area and response time. Appendix G shows runoff coefficients for both rural and urban land use conditions. The computed C value for this drainage shed is 0.56. It was computed by factoring the relative amount of 10,000 sq. ft. residential lots, open space, impervious area and roads. The calculations for the C-values can be found in Table 3.

**C-Factor Table**

Location	Open Space (C=0.35)	Impervious (C=0.90)	Residential lots 10,000 sq. ft. (C=0.50)	Total A (acres)	Total CA	Weighted $C_w$
3-36" Culverts	7.82	13.85	48.62	70.29	39.51	0.56

Table 3



The Rational Method flows to the Nutley/Marshall culvert can be found in Table 4.

**Rational Method Flows**

	2 YR	10 YR	25 YR	50 YR	100 YR
Rational using BDE Chart (cfs)	119.66	158.63	197.87	240.43	270.62

Table 4

Alternatively, if the SCS TR-55 methodology is used to compute runoff we find the flows in Table 5. It should be noted that TR-55 takes soil types into account while the Rational Method does not.

**SCS Method Flows**

	2 YR	10 YR	25 YR	50 YR	100 YR
SCS Method using TR-55 (cfs)	146.58	281.93	336.36	404.66	424.91

Table 5

The VDOT requirements for Headwater Computations are located in the VDOT Drainage Manual 8.3.2. The Culvert Design Form was used to analyze the different frequency storms and determine the corresponding control headwater elevation. The Culvert Design is in Appendix H. The allowable headwater is the depth of water that can be ponded at the upstream end of the culvert during the design flood, measured from the culvert invert. According to VDOT Standards 8.3.2.2 the headwater shall not be higher than an elevation that is 18 inches below the outer edge of the shoulder at its lowest point in the grade. Another parameter is that HW/D is at least 1.0 and not to exceed 1.5 where HW is the headwater depth from the culvert inlet invert and D is the height of the barrel.

**V. Comparison with VDOT Road Design Plans**

In our Drainage Study we found design plans for Nutley Street and Marshall at the VDOT District Office. The Northern Virginia District VDOT office in Chantilly has construction and design records of some VDOT roads including the Plan and Profiles of Nutley Street dated March 11, 1963. According to these plans the drainage area to the 3 - 36" Culverts was estimated to be 78 Acres. According to Tim Sprout who has worked with the VDOT records for 20 years there are no design calculations available for the culverts because those calculations were never submitted to VDOT. According to Thomas Vanpoole a reviewer from VDOT, the preferred methodology for hydrology for areas less than 200 acres is the Rational Method.

The 1963 road design plans used different design criteria than current design standards would dictate. The drainage shed area has likely changed due to recent development and construction which may account for the difference in drainage area (78 acres in 1963 versus 70.29 acres today). Another difference is the methodology to calculate the intensity of a storm event now uses B, D, E factors vs. the old standards of IDF Curves. The roadway classification of Nutley Street is now a Minor Arterial B according to Fairfax County Zoning Ordinance Appendix 8. According to the VDOT Drainage Manual Minor Arterial Roads now need to be designed to the 25 year storm as shown in Appendix J. In 1963 it is likely that Nutley Street would have been classified as a secondary roadway. Based on the road classification, the current VDOT culvert design criteria would require the culvert to be designed using a 25 year storm vs. the old criteria which would have required a 10 year storm as the basis for design.

Item # 5

It appears that the culvert at the intersection of Nutley and Marshall was designed and built prior to the construction of the 717 Marshall Street Residence. The VDOT Plans are dated 1963. Fairfax County Department of Tax Administration, Real Estate Division shows that the 717 Marshall Residence was built in 1975 as shown in Appendix K.

## VI. Conclusions

The Rational Method is recommended by VDOT to compute runoff from drainage areas less than 200 acres and is most likely the methodology used in 1963 when the culvert was originally designed. The classification of Nutley Street in 1963 would have indicated that the 10-year storm event should be used to determine the culvert size. Our calculations indicate that the culvert was sized appropriately in 1963 to convey the runoff from a 10-year storm event computed using the Rational Method. However, since 1963 several factors have arisen that would affect how the culvert would be sized if being constructed today, namely:

1. The house at 717 Marshall Street now exists with a basement entrance that would need to be taken into account. This house did not exist in 1963 and thus would not have been a determining factor in culvert sizing calculations at that time.
2. Nutley Street is now classified as a Minor Arterial versus its classification in 1963 as a Secondary Roadway. Thus, today the culvert would be designed to convey the 25-year storm event while in 1963 it would likely have been designed to convey the 10-year storm event.
3. Alternative hydrologic methods are often considered in mid-sized drainage areas (i.e. between 20 acres and 200 acres). While the Rational Method is intended to serve drainage areas up to 200 acres, and VDOT still accepts and recommends this methodology, many municipal jurisdictions have begun to require SCS methodologies for drainage areas in excess of 20 acres. The SCS methodologies take into account additional factors affecting runoff rates such as soil types. In this drainage shed, the soils are known to have low permeability which would likely result in higher runoff rates than computed by the Rational Method.
4. The areaway entrance to the basement of 717 Marshall Street is at an elevation of 331.60. Based on our runoff calculations, stormwater would likely breach this threshold elevation and flood the basement during the 10-Year storm event using the Rational Method methodology or the 2-Year storm event if the TR-55 methodology is used.
5. The first-floor elevation of the 717 Marshall Residence is 335.75 which is over two feet higher than the elevation of Nutley Street at the culvert. Specific analysis of the storm event that would cause stormwater to overtop Nutley Street is beyond the scope of this report.
6. Debris flow in the channel during large storm events could adversely impact the hydraulic efficiency of the culvert. This debris could result in more frequent high-water events and high water levels during any given storm event.

The table below presents our findings concerning runoff computed by the Rational Method and by the SCS TR-55 Method. It also presents the water surface elevation resulting from the computed runoff rates. Data concerning critical elevations of concern at the culvert inlet are also provided such as top of road, road shoulder, and basement areaway threshold.

<b>717 Marshall Road Drainage Study</b>					
	2 YR	10 YR	25 YR	50 YR	100 YR
<b>Rational using BDE Chart (cfs)</b>	119.66	158.63	197.87	204.80	270.62
<b>Water Surface Elevation (1)</b>	331.00	331.93	333.14	333.39	RD. O.T. (2)
<b>SCS Method (cfs)</b>	146.58	281.93	336.36	404.66	424.91
<b>Water Surface Elevation (1)</b>	331.61	RD. O.T. (2)	RD. O.T. (2)	RD. O.T. (2)	RD. O.T. (2)
<b>Notes: 1) Elevations based upon VDOT Culvert Headwater Calculations</b>					
2) RD. O.T. = Road Overtopping					
3) Culvert Design Elevations					
Nutley Shoulder Elevation			333.39		
VDOT Required Allowable Headwater			-1.50		
VDOT Max Water Surface Elevation			331.89		
Flow to reach VDOT Max Water Surface Elevation =			157.30	cfs	
Flow needed to overtop road =			204.80	cfs	
4) House Reference Elevations					
Elevation to areaway threshold of house =			331.60		
Flow needed to flood 717 Marshall Basement =			146.00	cfs	
First Floor Elevation 717 Marshall			335.75		

Table 6

### Recommendations

Although it appears that the Nutley/Marshall culvert was originally designed in accordance with applicable criteria, the house at 717 Marshall was subsequently constructed within the area influenced by the culvert headwater. It is beyond the scope of this analysis to determine the permitting conditions associated with construction of the house. Rather, this report has clarified that the headwater elevation will clearly impact the basement areaway during a 146 cfs stormwater flow associated with storms of a little under a 10 year frequency as computed by the Rational Method. As the Rational Method does not fully account for Class D soil impacts, (i.e. low permeability soils), it is likely that these impacts may occur more frequently. The TR-55 Methodology would indicate stormwater impacts to the basement during a 2 year storm event.

Several options are offered for consideration to alleviate the flooding being experienced. Ultimately, selection of a solution to this condition entails many factors, which are not within the scope of this report including cost of implementation, maintenance, assessment of liability/responsibility, etc. Options which might be considered include:

- A. Raise entrance elevation to the basement areaway above headwater impacts by re-grading and increasing height of areaway wall.
- B. Move basement area-way to other side of house.
- C. Close off basement entrance and re-grade yard.
- D. Install bulkhead type waterproof door to basement.
- E. Add additional culverts to convey water beneath Nutley Street and reduce predicted headwater elevations.

Ultimately, selection of a preferred solution will also entail a risk tolerance decision regarding the acceptable frequency of stormwater impacts. More specifically, a decision would need to be made concerning the frequency of the storm event for design purposes, i.e. the 25-year, 50-year or 100-year storm event.

Item # 5

## **I. Introduction**

This project is intended to evaluate the hydrologic and hydraulic conditions affecting the existing stormwater inlet and associated piping in front of the residence at 701 Meadow Lane S.W. Tasks performed as part of this project include:

- A. Acquire topography, storm sewer and soils maps for the area.
- B. Analyze maps to determine the effective drainage area.
- C. Determine predominant land cover conditions.
- D. Prepare Rational Method analysis of drainage shed leading into inlet and pipe system.
- E. Survey as-built condition of inlets, structures and pipes (3 pipes upstream and local yard/street conditions). (use existing manhole data for benchmark)
- F. Analyze inlet capacity and prepare hydraulic grade line analysis.
- G. Obtain original street design, and evaluate present and past storm design criteria.
- H. Prepare list of options to reduce potential for inlet surcharge and overlot flooding.
- I. Prepare letter report of findings.

## **II. Description of Drainage Shed**

The drainage shed area of 125.72 acres was derived from 2008 Fairfax County Topographic Maps on Map grids 38-4 and 48-2 as shown in Appendix A. The existing road network and existing stormwater inlets were taken into consideration when deriving the contributing drainage area. Appendix A illustrates the ground surface elevation with contour lines that join points of equal elevation. Appendix A also illustrates other property map information such as lot lines, road right-of-way, etc. The contour interval is 5 feet. The date of the aerial photography used to determine the ground elevation is 1997.

The soils information for the drainage shed was based on the Natural Resources Conservation Service National Cooperative Soil Survey as shown in Appendix B. According to the NRCS Web Soil Survey 2.0, 100% of the soils within the drainage shed are D soils. The "Description & Interpretive Guide to NRCS Mapped Soils in Fairfax County," describes D soils as having a slow infiltration rate, due to a shallow impermeable layer of bedrock or a permanent high water table near the surface, and therefore has a high runoff potential.

The land cover conditions of the drainage shed also affects stormwater flow calculations. The 125.72 drainage shed includes 93.43 acres of ¼ acre residential lots. There are approximately 9.32 acres of open space and 22.97 acres of impervious area.

The calculation of the runoff time of concentration entails three components: 1) sheet flow, 2) shallow concentration, and 3) channel flow. This drainage shed has approximately 100' sheet flow along the southwest corner. Approximately 1040' of shallow concentrated flow exists until the stormwater reaches the existing piped storm conveyance system. After flowing through about 2440' of piped storm system the stormwater reaches the area of concern on Meadow Lane.

### III. Description of the Area of Concern

This project is intended to evaluate the hydrologic and hydraulic conditions affecting the existing stormwater inlet and associated piping in front of the residence at 701 Meadow Lane S.W. Appendix C presents a field run topographic survey of the localized area of concern. At the inlet located in front of 701 Meadow Lane S.W. there is a contributing drainage shed of 125.72 acres. A 48" reinforced concrete pipe (RCP) and a 30" RCP both discharge into inlet structure #4 in front of 701 Meadow Lane S.W. Downstream of the inlet is a 54" RCP. According to the home owner there is significant flooding at this inlet three to four times a year. If storm flows cannot be conveyed in the storm water pipe system, the topographic map indicates that stormwater would overtop the curb and flow across the front yard of 701 Meadow Lane S.W.

### IV. Hydrologic/Hydraulic Analyses

The Rational Method is recommended by VDOT for estimating the design storm peak runoff for drainage areas as large as 200 acres. Our hydrologic model is based on the VDOT Drainage Manual Chapter 6.4.4.1 Rational Method. According to the VDOT Drainage Manual Chapter 6.4.4.1.4 the rational formula estimates the peak rate of runoff at any location in a watershed as a function of the drainage area, runoff coefficient, and mean rainfall intensity for a duration equal to the time of concentration (the time required for water to flow from the most hydraulically remote point of the basin to the location being analyzed).

The Rational Method Formula is expressed as follows:

$$Q = C_f * C * I * A$$

Where:

Q = Maximum rate of runoff, cubic feet per second (cfs)

C<sub>f</sub> = Saturation factor

C = Runoff coefficient representing a ratio of runoff to rainfall (dimensionless)

i = Average rainfall intensity for a duration equal to the time of concentration for a selected return period, inches per hour (in/hr)

A = Drainage area contributing to the design location, acres (ac)

In Chapter 6.4.4.1.5 Infrequent Storm of the VDOT Drainage Manual, the coefficients given in Table 6-2 are for storms with less than a 10-year recurrence interval. Less frequent, higher intensity storms will require modification of the coefficient because infiltration and other losses have a proportionally smaller effect on runoff (Wright-McLaughlin 1969). The adjustment of the Rational Method for use with larger storms can be made by multiplying the right side of the Rational Formula by a saturation factor, C<sub>f</sub>. The product of C<sub>f</sub> and C should not be greater than 1.0. Table 6-2 lists the saturation factors for the Rational Method.

VDOT Drainage Manual, Table 6-2. Saturation Factors for Rational Formula

Recurrence Interval (Years)	C <sub>f</sub>
2, 5, and 10	1.0
25	1.1
50	1.2
100	1.25

VDOT Drainage Manual, 6.4.4.1.6 *Time of Concentration*

The time of concentration is the time required for water to flow from the hydraulically most remote point in the drainage area to the point under investigation. The time of concentration (tc) for the drainage area will be comprised of overland flow, channel flow, and conveyance flow in pipes. The time of concentration is used to calculate the intensity (I).

VDOT Drainage Manual, *Overland Flow Seelye Method*

VDOT experience has determined that the Overland Flow Time nomograph developed by E.E. Seelye normally provides a realistic estimate of overland flow time when properly applied within the limits shown on the nomograph. Refer to Appendix D for the Seelye chart. The Seelye method is the preferred VDOT method for computing overland flow. The overland flow for this project was estimated to be 100'.

VDOT Drainage Manual, *Channel Flow*

For channel flow or concentrated flow time VDOT has found that the nomograph entitled, "Time of Concentration of Small Drainage Basins" developed by P.Z. Kirpich provides a reasonable time estimate. Refer to Appendix E for the Kirpich nomograph. The calculations for the Time of Concentration can be found in Table 1.

<b>Time of Concentration</b>		
<b>Sheet Flow (L-M) (BASED ON SEELYE CHART)</b>		
Length =	100	ft
Slope =	1.00%	
C =	0.4	
Tc =	13	min
<b>Shallow Concentrated unpaved (M-N) (BASED ON KIRPICH CHART)</b>		
H =	5	ft
Length =	1040	ft
Slope =	0.48%	
Tc =	11	min
<b>Storm Pipe Flow (N-O)</b>		
C =	0.56	
I =	4.03	
A =	44.02	Acres
Q =	99.34	cfs
S =	2.00%	
L =	1124	
Velocity	15.11	fps
Tc =	1.24	min
<b>Storm Pipe Flow</b>		
C =	0.56	
I =	4.03	
A =	88.45	Acres
Q =	199.61	cfs
S =	2.00%	
L =	1316	
Velocity	18.12	fps
Tc =	1.21	min
TOTAL Tc =	26.45	

**Time of concentrations = 25 minutes**

Table 1

VDOT Drainage Manual, HDA 05-03

B, D, & E factors are used to determine rainfall intensity in the Rational and Modified Rational Methods (based on NOAA NW-14 Atlas data). The intensity values for this study can be found in the Table 2. VDOT's Adoption & Implementation of NOAA Atlas 14 Rainfall Precipitation Frequency Data, HDA 05-03 can be found in Appendix F.

**B, D, E Factors (FAIRFAX COUNTY)**

$$\text{Equation } I_r = B / (T_c + D)^E$$

Time of Concentration ( $T_c$ ) = 25.00 minutes

Rainfall Intensity	B	D	E	$I_r$
2 YR	55.09	11.50	0.84	2.68
10 YR	47.70	9.50	0.73	3.60
25 YR	39.18	7.25	0.65	4.10
50 YR	36.34	6.50	0.60	4.59
100 YR	32.29	5.00	0.55	4.97

Table 2

VDOT Drainage Manual, 6.4.4.1.7 *Runoff Coefficients*

The runoff coefficient (C) is a variable of the Rational Method that requires significant judgment and understanding on the part of the designer. The coefficient must account for all the factors affecting the relation of peak flow to average rainfall intensity other than area and response time. Appendix G shows runoff coefficients for both rural and urban land use conditions. The computed C value for this drainage shed is 0.56. It was computed by factoring the relative amount of ¼ acre residential lots, open space, impervious area and roads. The calculations for the C-values can be found in Table 3.

**C-Factor Table**

Location	Open Space (C=0.35)	Impervious (C=0.90)	Residential lots 10,000 sq. ft. (C=0.50)	Total A (acres)	Total CA	Weighted $C_w$
701 Meadow Lane S.W. Inlet	9.32 Ac	22.97 Ac	93.43 Ac	125.72	70.65	0.56

Table 3

The Rational Method flows to 701 Meadow Lane S.W. inlet can be found in Table 4.

**Rational Method Flows**

	2 YR	3 YR	4 YR	5 YR	10 YR
<b>Rational using BDE Chart (cfs)</b>	188.68	202.06	213.32	225.29	253.45

Table 4

The VDOT requirements for Storm System Design are located in the VDOT Drainage Manual 9.4.8. Storm Drain Design Computations were calculated using the LD-229 spreadsheet to analyze different frequency storms. Storm Sewer Piping is required to be designed to convey the 10 year storm according to current standards. The Storm sewer system was evaluated per the 2, 3, 4, 5 & 10 year storms. The Storm Sewer Design Computations can be found in Appendix H.

Inlet Capacity requirements are located in the VDOT Drainage Manual 9.4.6. The existing inlets were evaluated using current standards with HEC-12. The inlets are to be designed to intercept runoff from a storm having an intensity of four inches per hour using the rational method. In this drainage shed there are two types of inlets that direct stormwater into the storm system. The first type of inlet is the continuous grade inlet which is used when stormwater is flowing downhill and enters from one side of the inlet. The second type of inlet is the sag inlet which is used when stormwater is flowing to a roadway low point and thus water enters the inlet from both sides. Spread is the width of flow measured laterally from the flowline. With a curb and gutter section, it is the intersection of the gutter pan and the curb. The design requirements for spread is half the driving lane plus the gutter width if any. Meadow Lane would require the maximum spread in an inlet to be eight feet. The inlet capacity computations can be found in Appendix J.

Hydraulic grade line requirements are located in the VDOT Drainage Manual 9.4.9. The hydraulic grade line (HGL) is an important feature to be established relating to the hydraulic design of storm drains. The hydraulic grade line aids the designer in determining the acceptability of the system by establishing the elevations to which water will rise in the structures (inlets, manholes, etc.) along the system when it is operating under the recommended design frequency storm. The hydraulic grade line for the 2 year and 10 year storms can be found in Appendix I.

#### **V. Comparison with old Design Requirements**

During the course of this Drainage Study the Town of Vienna provided archived construction drawings for Meadow Lane S.W. and the surrounding roads dated April 25 1957. There were no design parameters or computations for the existing storm system along Meadow Lane. It appears that the Town archives only contain the construction drawings for the roads and not the original design parameters or engineering computations for the storm system.

It may be possible that the 1957 road design plans used different design criteria than current design standards would dictate. First, the contributing drainage shed has likely changed due to more recent development and construction. Another likely difference is the methodology used to calculate the intensity of a storm. Today's Rational Method design standards utilize B, D, E factors while the old standards were based on IDF curves. According to John Dewell, a Senior Hydraulics Advisor at VDOT the current design methodology is more conservative than the design methodology that was applicable in 1957.

Based on real estate tax records it appears that the storm system including Inlet 4 was designed and built prior to the construction of the 701 Meadow Lane S.W. Residence. The construction plans are dated 1957 and the Fairfax County Department of Tax Administration, Real Estate Division records show that the 701 Meadow Lane S.W. Residence was built in 1960, (see Appendix K). The 1957 storm sewer design should have anticipated the runoff from future single family home development in the area, however, the specific details concerning future lot grading conditions at 701 Meadow Lane S.W. may not have been known.



## VI. Findings

1. The pipes in the storm system should be designed to convey the 10 year flow. Analysis of the 10-year storm flow indicates the existing pipe system is undersized, (see Storm System Analysis located in Appendix H). Table 6 provides a summary of the maximum pipe flows in the storm system when compared to the 2, 3, 4, 5 & 10 year storm flows. It shows that the only pipe currently able to handle the 10 year flow is between Ex. Str. 2 and Ex. Str. 1. A plan view of the Storm Pipe System can be found in Appendix C.

STORM PIPE RESULTS							
FROM STR. #	TO STR. #	MAX PIPE FLOW	2 YR FLOW (cfs)	3 YR FLOW (cfs)	4 YR FLOW (cfs)	5 YR FLOW (cfs)	10 YR FLOW (cfs)
EX. 4B	EX. 4A	58.68	52.69	56.43	59.57	62.92	67.20
EX. 4A	EX. 4	60.99	56.79	61.32	65.43	69.54	74.29
EX. 7	EX. 6	142.28	113.96	122.03	128.84	136.07	150.07
EX. 6	EX. 5	131.20	122.98	131.59	139.90	148.21	165.93
EX. 5	EX. 4	137.42	126.29	135.25	144.38	153.50	169.17
EX. 4	EX. 3	182.06	171.56	182.98	194.32	205.65	253.45
EX. 3	EX. 2	220.31	188.68	202.06	213.32	225.29	253.45
EX. 2	EX. 1	342.29	188.68	202.06	213.32	225.29	253.45
PIPE FLOW GREATER THAN MAX PIPE CAPACITY							

Table 6

2. Inlets should be designed to convey the flow generated by a storm intensity of 4 inches/hour. Analysis of this design storm indicates the Inlets serving the storm system are undersized resulting in a significant amount of carryover to the down stream inlets. The carryover flows down Meadow Lane S.W. and Gibson Drive towards the inlet in front of 701 Meadow Lane S. W. The recommended spread for inlets should be less than eight feet and the spread for Inlets 4, 4A and 5 is greater than 8', (See Appendix J for Storm Inlet Design Computations). Table 7 provides a summary of the spread at each existing inlet when compared with 4" per hour storm flows.

Inlet Spread Summary			
INLET STR. #	4" PER HOUR FLOW (cfs)	ALLOWABLE INLET SPREAD	spread
EX. 4	8.36	8.00	23.05
EX. 4A	6.12	8.00	18.72
EX. 4B	2.53	8.00	7.21
EX. 5	4.95	8.00	10.57
EX. 7	2.04	8.00	7.89
SPREAD GREATER THAN MAX INLET SPREAD			

Table 7

3. The Hydraulic Grade Line is above the Rim Elevation of several structures as shown in Table 8.

HYDRAULIC GRADE LINE RESULTS			
INLET STRUCTURE NUMBER	Rim Elevation	2-Year Inlet Water Surface Elevation	10-Year Inlet Water Surface Elevation
EX 4A	352.71	353.57	356.96
EX 4B	354.01	358.46	360.48
EX 2	350.71	349.06	348.97
EX 3	354.16	351.36	351.33
EX 4	352.64		
EX 5	355.70		
EX 6	360.15		
EX 7	361.97		
HGL Greater than Rim Elevation			

Table 8

## VII. Conclusions

The Rational Method is recommended by VDOT to compute runoff from drainage areas less than 200 acres and is most likely the methodology used in 1957 when the storm system was originally designed. The existing storm system is under sized which results in overland flow of stormwater during design storm events. During a 10-year storm event the stormwater surcharges Inlet 4. The topographic map indicates that the stormwater would overtop the curb and flow across the front yard of 701 Meadow Lane S.W. The Stormwater would then flow at Inlet 4 between 701 Meadow Lane S.W. and 703 Meadow Lane S.W. towards the existing downstream outfall at Ex. Str. 1. The storm pipes, inlets & Hydraulic Grade Line calculations show that Inlet 4 at 701 Meadow Lane S.W. inlet will likely surcharge when flows exceed 182 cfs which is less than a 2 year storm frequency using the rational method. The under sized piping and inlets clearly contribute to the reported flooding issues at 701 Meadow Lane S.W.

It appears the stormwater pipe run along Meadow Lane from the Study Point to Courthouse Road is undersized. Based on existing construction drawings it appears that the majority of the roads and houses in the area were constructed in the 50's - 60's. According to Fairfax County tax records the majority of the houses north of Courthouse Road were constructed between 1953-1956. The 701 Meadow Lane Residence was constructed in 1960 according to Fairfax County Tax Records. The construction drawings for Meadow Lane are dated 1957 indicating the road was likely constructed after the houses on the north side of Courthouse. Thus the stormwater generated by development north of Courthouse Road should have been included in the Meadow Lane design documents. Since those design documents are not available, it is not possible to verify the basis of design for the Meadow Lane storm pipe system.

### **Recommendations**

The storm water collection and conveyance system along Meadow Lane S.W. should be re-evaluated and improvements should be designed and constructed to bring it up to current VDOT standards. This evaluation should consider alternative hydrologic methods in addition the Standards Rational Method.

Alternative hydrologic methods are often considered in mid-sized drainage areas (i.e. between 20 acres and 200 acres). While the Rational Method is intended to serve drainage areas up to 200 acres, and VDOT still accepts and recommends this methodology, many municipal jurisdictions have begun to require SCS methodologies for drainage areas in excess of 20 acres. The SCS methodologies take into account additional factors affecting runoff rates such as soil types. In this drainage shed, the soils are known to have low permeability which would likely result in higher runoff rates than those computed by the Rational Method.

Several options are offered for consideration to alleviate the reported flooding concerns. Ultimately, selection of a solution to this condition entails many factors, which are not within the scope of this report including cost of implementation, maintenance, assessment of liability/responsibility, etc. Options which might be considered include:

- A. Increase the size of the pipes and provide flanking inlets along the main run.
- B. Install parallel pipes along side the existing pipes to increase conveyance capacity of the system.
- C. Provide above ground or underground detention to temporarily store water and release the storm water at a lower flow rate.
- D. Divert some stormwater upstream of 701 Meadow Lane S.W. towards another part of the Vienna Storm system, having sufficient capacity.
- E. Provide a channel to provide overland relief and divert water around the existing 701 Meadow Lane S.W. residence.

Ultimately, selection of a preferred solution will also entail a risk tolerance decision regarding the acceptable frequency of stormwater impacts. More specifically, a decision would need to be made concerning the frequency of the storm event to be used for design purposes, i.e. the 10-year, 25-year, 50-year or 100-year storm event, and how those storm events are accounted for in design of piping and overland relief systems.



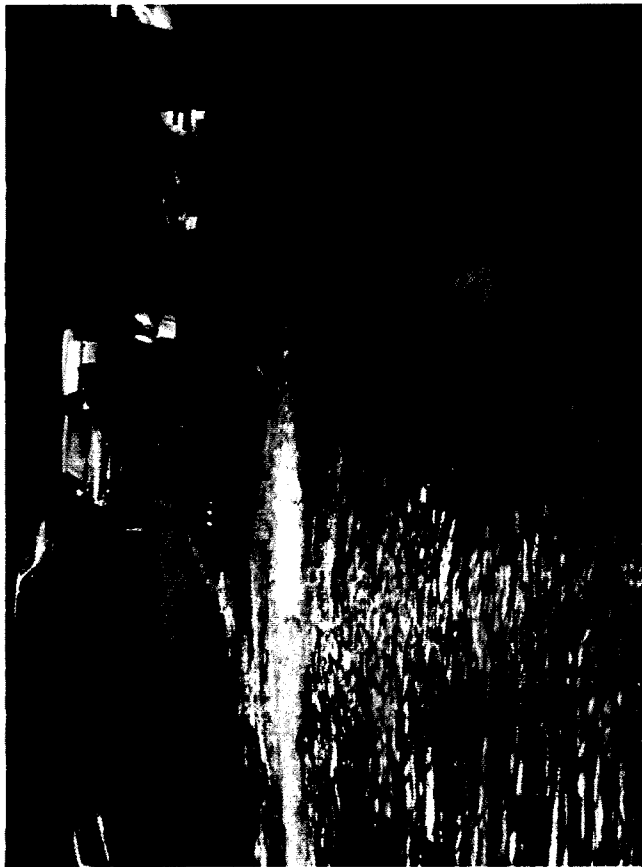




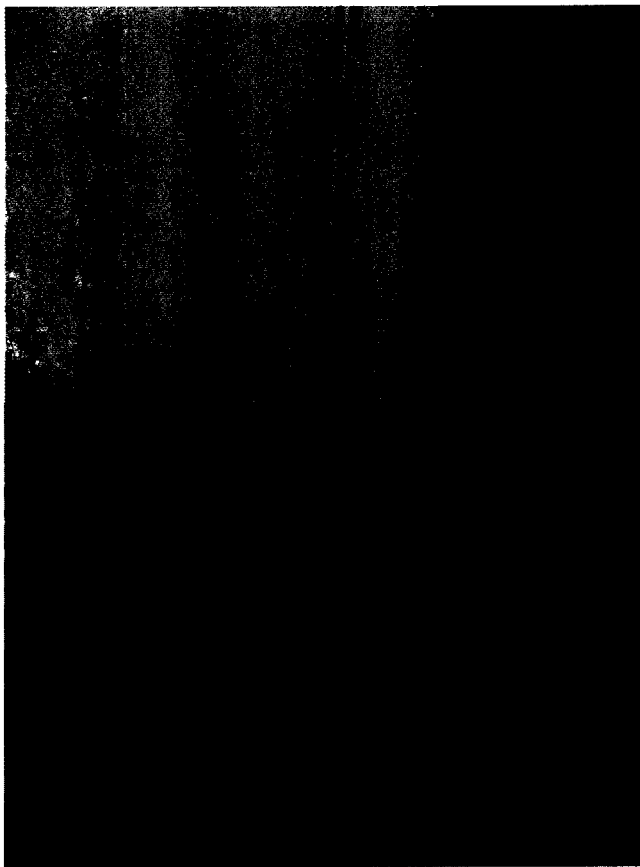






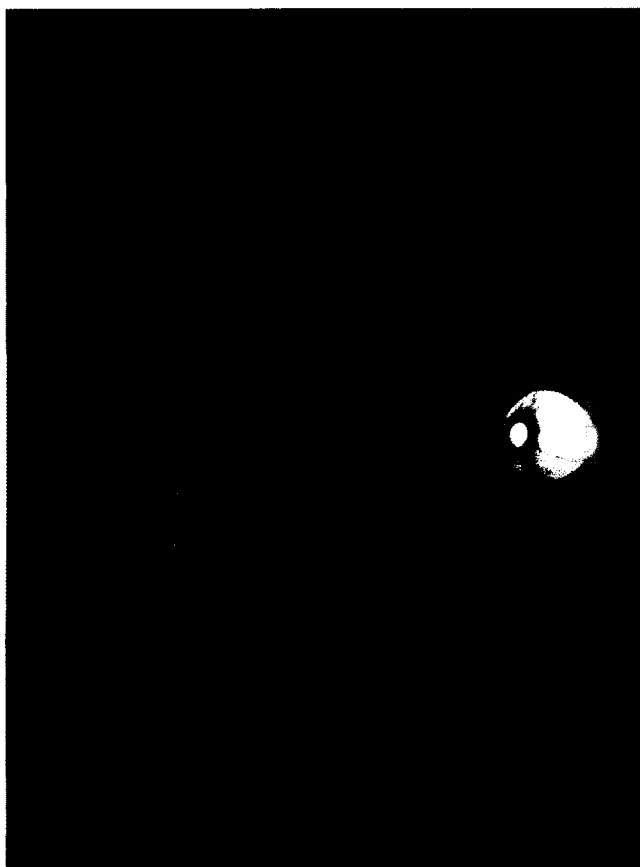


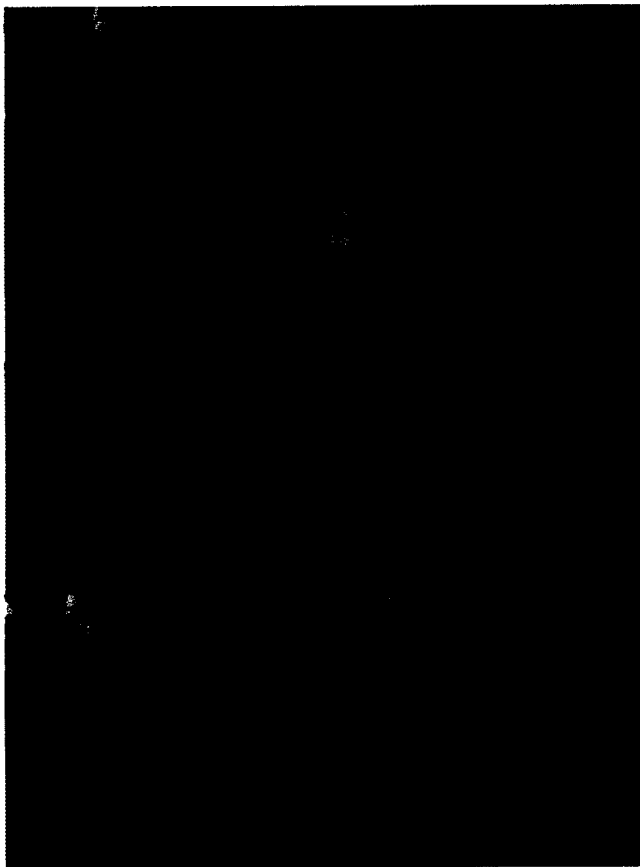










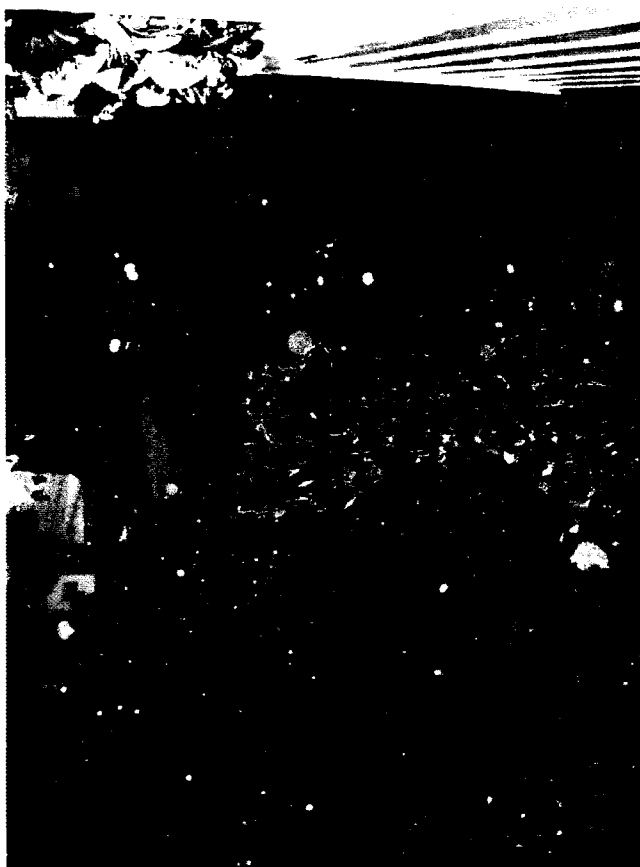








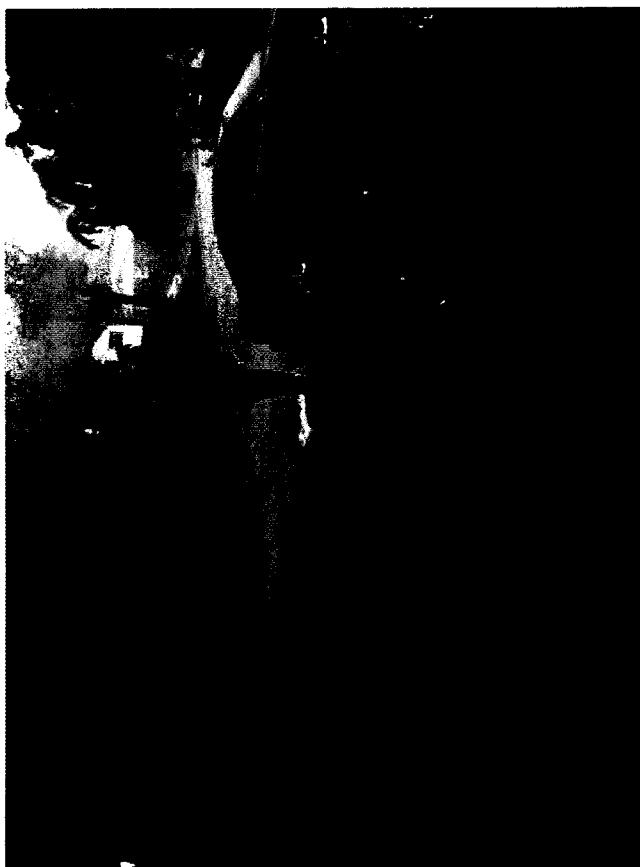










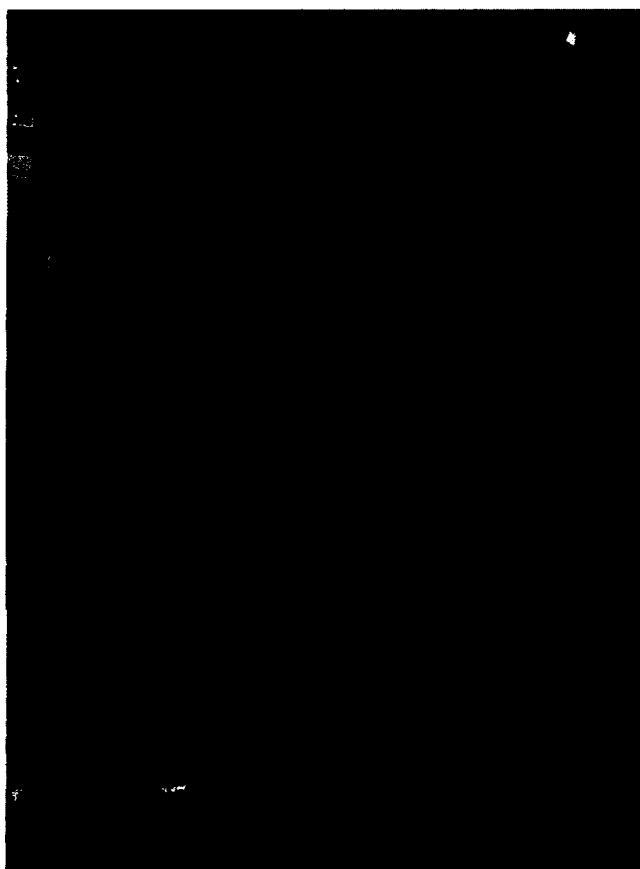












**Jester, Sandy**

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**From:** Veronique Lilienthal <vlilienthal@yahoo.com>  
**Sent:** Monday, September 26, 2011 8:51 PM  
**To:** Public Works, Town of Vienna, Department of; Gallagher, Michael  
**Cc:** vlilienthal@yahoo.com; lilienthal@yahoo.com  
**Subject:** Drainage issues on Ninovan Road SE

Dear Mr. Gallagher,

We have lived at 616 Ninovan Road SE since April of 2005 in a home that was built in 1986 (Shady Acres lots). As property owners and taxpayers, we have several concerns that we are hoping to work with you to resolve.

**Issue #1:**

Our home sits at the bottom of a long driveway and downhill from several other properties. Unfortunately, our home was built with a basement door that is about 4 feet below grade level, and our back yard is the lowest point between Glyndon Street and the bike trail behind us. As such, our property is the destination point for a significant amount of storm water that flows downhill from Glyndon Street. Consequently, our yard and our home flood frequently when there are heavy rains. (see attached photos) We have spent thousands of dollars to remedy our water situation with sump pumps, re-routing of gutters, and soon a dry well/French drain. All of these things are not enough to keep the storm water runoff from heading our direction and flooding our home and our property.

As you probably already know, Ninovan Road is a single lane road without any curb, gutter, or drain of any kind. Additionally, Ninovan Road was constructed without a crown to keep the water from the other side of the road from running unobstructed to our side of the road. During a heavy rain, this is visible, and we have video footage of this that we could provide to you if needed.

**Issue #2**

In recent years, an asphalt bump was added by your department to the entrance of our section of Ninovan Road and along the front of 618 Ninovan. Although this seems to have partially remedied the concerns of that property, water frequently puddles at the entrance to Ninovan Road at Talahi Road. This is not only a nuisance, making it difficult to walk onto Talahi Road without getting wet feet, but it is also a place for mosquitos to fester.

**Issue #3**

Another concern that we have is the narrowness of Ninovan Road. It is difficult for large trucks and service vehicles to enter and exit the street, particularly when turning onto or from Talahi Road. This could potentially be a safety issue if an emergency were to occur in this neighborhood.

It is our understanding that the original purchasers of the Shady Acres properties and the Ninovan Place homes paid money into an escrow that would eventually fund a curb and gutter along our portion of Ninovan Road. We are hoping that the Town of Vienna will soon make that a reality, and we are eager to work with your department in support of this effort. We appreciate your time and look forward to hearing from you.

Sincerely,

Item # 5

John and Veronique Lilienthal  
703-938-1519

Veronique

## **Jester, Sandy**

---

**From:** Veronique Lilienthal <vlilienthal@yahoo.com>  
**Sent:** Monday, September 26, 2011 8:56 PM  
**To:** Public Works, Town of Vienna, Department of; Gallagher, Michael  
**Cc:** lilienthal@yahoo.com  
**Subject:** Re: Drainage issues on Ninovan Road SE  
**Attachments:** for public works.jpg

Here is the attachment that I referenced in the previous email.

Veronique

**From:** Veronique Lilienthal <vlilienthal@yahoo.com>  
**To:** "dpw@viennava.gov" <dpw@viennava.gov>; "mgallagher@viennava.gov" <mgallagher@viennava.gov>  
**Cc:** "vlilienthal@yahoo.com" <vlilienthal@yahoo.com>; "lilienthal@yahoo.com" <lilienthal@yahoo.com>  
**Sent:** Monday, September 26, 2011 8:50 PM  
**Subject:** Drainage issues on Ninovan Road SE

Dear Mr. Gallagher,

We have lived at 616 Ninovan Road SE since April of 2005 in a home that was built in 1986 (Shady Acres lots). As property owners and taxpayers, we have several concerns that we are hoping to work with you to resolve.

### **Issue #1:**

Our home sits at the bottom of a long driveway and downhill from several other properties. Unfortunately, our home was built with a basement door that is about 4 feet below grade level, and our back yard is the lowest point between Glyndon Street and the bike trail behind us. As such, our property is the destination point for a significant amount of storm water that flows downhill from Glyndon Street. Consequently, our yard and our home flood frequently when there are heavy rains. (see attached photos) We have spent thousands of dollars to remedy our water situation with sump pumps, re-routing of gutters, and soon a dry well/French drain. All of these things are not enough to keep the storm water runoff from heading our direction and flooding our home and our property.

As you probably already know, Ninovan Road is a single lane road without any curb, gutter, or drain of any kind. Additionally, Ninovan Road was constructed without a crown to keep the water from the other side of the road from running unobstructed to our side of the road. During a heavy rain, this is visible, and we have video footage of this that we could provide to you if needed.

### **Issue #2**

In recent years, an asphalt bump was added by your department to the entrance of our section of Ninovan Road and along the front of 618 Ninovan. Although this seems to have partially remedied the concerns of that property, water frequently puddles at the entrance to Ninovan Road at Talahi Road. This is not only a nuisance, making it difficult to walk onto Talahi Road without getting wet feet, but it is also a place for mosquitos to fester.

### **Issue #3**

Item # 5

Another concern that we have is the narrowness of Ninovan Road . It is difficult for large trucks and service vehicles to enter and exit the street, particularly when turning onto or from Talahi Road . This could potentially be a safety issue if an emergency were to occur in this neighborhood.

It is our understanding that the original purchasers of the Shady Acres properties and the Ninovan Place homes paid money into an escrow that would eventually fund a curb and gutter along our portion of Ninovan Road . We are hoping that the Town of Vienna will soon make that a reality, and we are eager to work with your department in support of this effort. We appreciate your time and look forward to hearing from you.

Sincerely,

John and Veronique Lilienthal  
703-938-1519

Veronique

**Jester, Sandy**

---

**From:** Linda van Doorn <linda.vandoorn922@gmail.com>  
**Sent:** Tuesday, September 27, 2011 10:54 AM  
**To:** Gallagher, Michael; Public Works, Town of Vienna, Department of  
**Cc:** Hembree, Greg  
**Subject:** Letter regarding drainage issues on Ninovan Road  
**Attachments:** DPWdrainage.092511.pdf

Mr. Gallagher,

We have attached our letter regarding our concerns regarding the lack of drainage facilities on Ninovan Road.

Linda van Doorn



September 27, 2011

Mr. Michael Gallagher  
Department of Public Works  
Town of Vienna  
127 Center Street  
Vienna, Virginia 22180

We are writing to let you know our concerns regarding the lack of adequate drainage facilities in front of our home at 614 Ninovan Road S.E. ("Ninovan"). Ninovan is a single lane street with widths as narrow as 12 feet. There is not a drainage system in place on the street to stop water from flowing from the adjacent property at 310 Talahi Road, across the street and onto our properties at 612, 614, 616 and 618 Ninovan Road. The property at 310 Talahi Road is uphill from ours on Ninovan and has a significant downhill slope. The natural flow of the water from that property is onto the street and then onto our properties. There is a very shallow ditch on the property owned by the Town of Vienna on the opposite side of the street, but because it is shallow and because it does not drain anywhere, it serves at best as an open holding pool for the water and a perfect breeding ground for mosquitos. When the homes at 612 and 608 Ninovan Road were built, the developer put in a swale on the opposite side of the street to facilitate drainage for those two homes. Although there may have been an attempt to have that drainage system help other properties on the street that has not worked due to the slope of the land and the inability to keep the swale functioning as designed. As noted above since Ninovan is a narrow single lane street, any open grass swale cannot be maintained when cars and other service vehicles need to use the area for parking or for driving in order to pass another vehicle. We need a functioning drainage system such as a storm drain.

In the past when we have contacted the Department of Public Works, they have said that they could not improve the drainage system due to budgetary constraints and the small amount of property to work with owned by the Town on either side of the street. Although we do not know for certain how much land the Town owns on either side of the street, when the entire road area was surveyed and staked in the 2001 time frame when Ninovan Place was developed, we recall that the land owned by the Town on either side of the street is limited. There is greater area owned by the Town in front of the homes at Ninovan Place. We understood this was part of the rationale for not having further road improvements made at that time, including road widening and a legal culvasac put in at the end of the street.

As you may be aware, development plans and variance requests to the required side-street setback requirements have been submitted in the past for the property at 310 Talahi Road. Currently there is a very small home on the property. Our concerns regarding the future development of that property and the possibility of granting a variance to required side-street setback requirements are heightened by the lack of adequate drainage facilities on the road. We understand that those variance issues are within the purview of the Board of Zoning Appeals and that our concerns regarding the lack of adequate drainage on the road should be addressed with the Department of Public Works. However, since the current drainage system is not adequate, any new development of 310 Talahi Road, particularly any development closer to the street than allowed under required side-street setbacks, will cause additional drainage issues.

Your attention to this matter is greatly appreciated. If we can be of any help answering questions, please do not hesitate to contact us.

Sincerely,

s/ Linda van Doorn

s/ Arlan van Doorn

c.c. Mr. Greg Hembree

Zoning Administrator

**Jester, Sandy**

---

**From:** Linda van Doorn <linda.vandoorn922@gmail.com>  
**Sent:** Wednesday, September 28, 2011 1:03 PM  
**To:** Gallagher, Michael  
**Cc:** Linda van Doorn; Hembree, Greg  
**Subject:** Ninovan Road issues

Mr. Gallagher,

As my neighbors have shared their views with me, I understand that some would like to see the road widened for safety reasons. It would be helpful to know whether there is enough land owned by the Town to both correct the drainage issues and allow for an eventual road widening, if needed. If this is a situation where you could do one or the other but not both, that would be helpful to know. If that is information you are able to share with us, that would be helpful.

I think that is an important consideration.

Sorry to load you up with these issues but we are concerned that once any development is underway it will be too late to consider some of these implications.

Sincerely,

Linda van Doorn

## Jester, Sandy

---

**From:** David Tyson <dstyson@earthlink.net>  
**Sent:** Tuesday, September 27, 2011 3:46 PM  
**To:** Public Works, Town of Vienna, Department of; Gallagher, Michael  
**Cc:** Veronique Lilienthal; lilienthal@yahoo.com; Monica Cramer; Brad and Melissa Reed; BHKashdan@fcps.edu; Arlen and Linda VanDoorn; linda.vandoorn922@gmail.com; ellen.murphy1@netzero.net  
**Subject:** Re: Fw: Drainage issues on Ninovan Road SE

Dear Mr. Gallagher,

We have lived at 402 Talahi Road SE since September 2004. We live next to the Lilienthals (see below email) and have the low point of the neighborhood swale in our back yard (and the community storm drain). Since moving in we have encountered destructive storm water runoff resulting in erosion of the grass back yard. After replanting with liriopy, it washed out again and we replanted adding deer netting to hold down the plants and soil. We have continued to experience washing and soaking from heavy rains that has prevented ground cover growth. We most recently have contracted to replant the area again, adding a river rock-lined dry stream bed to route some of the heavy storm water to the drain.

We support the Lilienthal's request below and would appreciate any assistance in creating a Ninovan Road drainage system, redirecting runoff waters from the Ninovan Road area onto Talahi Road and its drains, or redirecting runoff waters into drains at the far west end of Ninovan Road.

Thank you for your attention to this neighborhood issue.

Sincerely,

David Tyson and Ellen Murphy  
202-957-8045 (David's cell)

-----Original Message-----

**From:** Veronique Lilienthal  
**Sent:** Sep 26, 2011 9:01 PM  
**To:** Monica Cramer , Brad and Melissa Reed , "dstyson@earthlink.net" , "BHKashdan@fcps.edu" , Arlen and Linda VanDoorn , "linda.vandoorn922@gmail.com"  
**Subject:** Fw: Drainage issues on Ninovan Road SE

FYI

**From:** Veronique Lilienthal <vlilienthal@yahoo.com>  
**To:** "dpw@viennava.gov" <dpw@viennava.gov>; "mgallagher@viennava.gov" <mgallagher@viennava.gov>  
**Cc:** "vlilienthal@yahoo.com" <vlilienthal@yahoo.com>; "lilienthal@yahoo.com" <lilienthal@yahoo.com>  
**Sent:** Monday, September 26, 2011 8:50 PM  
**Subject:** Drainage issues on Ninovan Road SE

Dear Mr. Gallagher,

We have lived at 616 Ninovan Road SE since April of 2005 in a home that was built in 1986 (Shady Acres lots). As property owners and taxpayers, we have several concerns that we are hoping to work with you to resolve.

**Issue #1:**

Item # 5

Our home sits at the bottom of a long driveway and downhill from several other properties. Unfortunately, our home was built with a basement door that is about 4 feet below grade level, and our back yard is the lowest point between Glyndon Street and the bike trail behind us. As such, our property is the destination point for a significant amount of storm water that flows downhill from Glyndon Street . Consequently, our yard and our home flood frequently when there are heavy rains. (see attached photos) We have spent thousands of dollars to remedy our water situation with sump pumps, re-routing of gutters, and soon a dry well/French drain. All of these things are not enough to keep the storm water runoff from heading our direction and flooding our home and our property.

As you probably already know, Ninovan Road is a single lane road without any curb, gutter, or drain of any kind. Additionally, Ninovan Road was constructed without a crown to keep the water from the other side of the road from running unobstructed to our side of the road. During a heavy rain, this is visible, and we have video footage of this that we could provide to you if needed.

**Issue #2**

In recent years, an asphalt bump was added by your department to the entrance of our section of Ninovan Road and along the front of 618 Ninovan. Although this seems to have partially remedied the concerns of that property, water frequently puddles at the entrance to Ninovan Road at Talahi Road . This is not only a nuisance, making it difficult to walk onto Talahi Road without getting wet feet, but it is also a place for mosquitos to fester.

**Issue #3**

Another concern that we have is the narrowness of Ninovan Road . It is difficult for large trucks and service vehicles to enter and exit the street, particularly when turning onto or from Talahi Road . This could potentially be a safety issue if an emergency were to occur in this neighborhood.

It is our understanding that the original purchasers of the Shady Acres properties and the Ninovan Place homes paid money into an escrow that would eventually fund a curb and gutter along our portion of Ninovan Road . We are hoping that the Town of Vienna will soon make that a reality, and we are eager to work with your department in support of this effort. We appreciate your time and look forward to hearing from you.

Sincerely,

John and Veronique Lilienthal  
703-938-1519

## **Jester, Sandy**

---

**From:** Kashdan, Barrett H. <BHKashdan@fcps.edu>  
**Sent:** Tuesday, September 27, 2011 4:50 PM  
**To:** Public Works, Town of Vienna, Department of; Gallagher, Michael; dtyson@earthlink.net  
**Cc:** Veronique Lilienthal; lilienthal@yahoo.com; Monica Cramer; Brad and Melissa Reed; Arlen and Linda VanDoorn; linda.vandoorn922@gmail.com; ellen.murphy1@netzero.net  
**Subject:** [Released by User] RE: Fw: Drainage issues on Ninovan Road SE

Dear Mr. Gallagher,

My name is Barrett Kashdan and I own the house at 618 Niniovan Rd, neighbors with all the folks you have received letters and emails from. At the zoning board meeting last week, you had an idea of what we are facing with every rain storm. We deal with it regularly but NEVER get use to it.

The concerns stated by my neighbors affect all of us. When I purchased the house back in 1986, I already knew that it was a public city road with public sanitation and snow removal. That is how it was advertised. It was not considered a pipstem when I bought it. To my surprise, during rain storms, water would come gushing down from Talaihi, bank left and create a lake in my front yard, but.... not stop there. In my basement, which is finished, I would have my own 'indoor pool'. Now I know that I didn't have an indoor pool listed on my deed so this was totally unwelcomed for sure. My neighbors also had a lovely lake in their back yard in addition to their own unwelcomed indoor pool. I spoke with a Mr. Mark Baumgartner from the Public Works Department back then. He came over and together we came up with the idea of a speed bump to divert the water coming down from Talaihi. It helped some but we continued to have problems. He returned at my request and raised the curb in front of my house with blacktop and this helped somewhat. We both agreed that a town drainage system was necessary else the problem would continue. He did say that this was a Town issue.

So, after all these years and with thousands of dollars lost by your citizens in constantly repairing our basements, lawns, flower beds, and fighting the mosquitoes and mole that comes with the territory, ....don't you think it about time that the Town of Vienna create a workable drainage system that would make our lives more bearable. That is what Mr. Baumgartner said ultimately had to be done. We have shovels and can even help since time is of essence.

Can you please tell me and my neighbors what the next step is in getting a workable drainage system in place ?

I will eagerly await your reply.

Thanks you.

Barrett Kashdan

duke618@aol.com<mailto:duke618@aol.com>

bhkashdan@fcps.edu<mailto:bhkashdan@fcps.edu>

---

From: David Tyson [dstyson@earthlink.net]

Sent: Tuesday, September 27, 2011 3:46 PM

To: dpw@viennava.gov; mgallagher@viennava.gov

Cc: Veronique Lilienthal; lilienthal@yahoo.com; Monica Cramer; Brad and Melissa Reed; Kashdan, Barrett H.; Arlen and Linda VanDoorn; linda.vandoorn922@gmail.com; ellen.murphy1@netzero.net

Subject: Re: Fw: Drainage issues on Ninovan Road SE

Dear Mr. Gallagher,

We have lived at 402 Talahi Road SE since September 2004. We live next to the Lilienthals (see below email) and have the low point of the neighborhood swale in our back yard (and the community storm drain). Since moving in we have encountered destructive storm water runoff resulting in erosion of the grass back yard. After replanting with liriopy, it washed out again and we replanted adding deer netting to hold down the plants and soil. We have continued to experience washing and soaking from heavy rains that has prevented ground cover growth. We most recently have contracted to replant the area again, adding a river rock-lined dry stream bed to route some of the heavy storm water to the drain.

We support the Lilienthal's request below and would appreciate any assistance in creating a Ninovan Road drainage system, redirecting runoff waters from the Ninovan Road area onto Talahi Road and its drains, or redirecting runoff waters into drains at the far west end of Ninovan Road.

Thank you for your attention to this neighborhood issue.

Sincerely,

David Tyson and Ellen Murphy  
202-957-8045 (David's cell)

-----Original Message-----

From: Veronique Lilienthal

Sent: Sep 26, 2011 9:01 PM

To: Monica Cramer , Brad and Melissa Reed , "dstyson@earthlink.net" , "BHKashdan@fcps.edu" , Arlen and Linda VanDoorn , "linda.vandoorn922@gmail.com"

Subject: Fw: Drainage issues on Ninovan Road SE

FYI

From: Veronique Lilienthal <vlilienthal@yahoo.com>

To: "dpw@viennava.gov" <dpw@viennava.gov>; "mgallagher@viennava.gov" <mgallagher@viennava.gov>

Cc: "vlilienthal@yahoo.com" <vlilienthal@yahoo.com>; "lilienthal@yahoo.com" <lilienthal@yahoo.com>

Sent: Monday, September 26, 2011 8:50 PM

Subject: Drainage issues on Ninovan Road SE

Dear Mr. Gallagher,

We have lived at 616 Ninovan Road SE since April of 2005 in a home that was built in 1986 (Shady Acres lots). As property owners and taxpayers, we have several concerns that we are hoping to work with you to resolve.

Issue #1:

Our home sits at the bottom of a long driveway and downhill from several other properties. Unfortunately, our home was built with a basement door that is about 4 feet below grade level, and our back yard is the lowest point between Glyndon Street and the bike trail behind us. As such, our property is the destination point for a significant amount of storm water that flows downhill from Glyndon Street . Consequently, our yard and our home flood frequently when there are heavy rains. (see attached photos) We have spent thousands of dollars to remedy our water situation with sump pumps, re-routing of gutters, and soon a dry well/French drain. All of these things are not enough to keep the storm water runoff from heading our direction and flooding our home and our property.

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Item # 5

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Sincerely,

John and Veronique Lilienthal  
703-938-1519



## Jester, Sandy

---

**From:** Pam Ward <twcmanage@aol.com>  
**Sent:** Wednesday, September 28, 2011 2:52 PM  
**To:** Johnson, Dennis  
**Cc:** Sherwood, Mark; Gallagher, Michael; Brooks, Timmy; Kahn, Donald  
**Subject:** Re: Storm Drain at Village Green Shopping Center

Thank you for looking into this for us. I certainly hope that the Town will be able to assist us.

Pam Ward  
TWC Association Management  
12110 Sunset Hills Road #60  
Reston, VA 20190  
703-437-5800 ext.104  
703-471-6578 (fax)

-----Original Message-----

**From:** Johnson, Dennis <djohnson@viennava.gov>  
**To:** Pam Ward <twcmanage@aol.com>  
**Cc:** Sherwood, Mark <MSherwood@viennava.gov>; Gallagher, Michael <MGallagher@viennava.gov>; Brooks, Timmy <TBrooks@viennava.gov>; Kahn, Donald <dkahn@viennava.gov>  
**Sent:** Wed, Sep 28, 2011 2:28 pm  
**Subject:** RE: Storm Drain at Village Green Shopping Center

We inspected the manholes and checked the pipes for obstructions, deflections or other problems. Everything checked out fine. So it may be something blocked the pipe but has since washed away or more likely the pipes are undersized.

Because you have had a history of flooding problems, we are including this location on a list of problem spots to be presented to Town Council as part of discussions on the new Capital Improvement Program. The Public Works Department will be recommending funding survey & engineering to determine what can be done, then fund construction. Of course the Town has lots of valid needs and the Council will have to balance all the competing needs and requests from other departments. The Capital budget discussion is tentatively set for December. Feel free to contact me anytime for a status report.

Dennis Johnson

**Dennis Johnson, PE** | Director | Town of Vienna | Public Works Department | 703-255-6386 |  
djohnson@viennava.gov  
[www.viennava.gov](http://www.viennava.gov)  
We're on [Facebook!](#)  
Follow us on [Twitter!](#)

---

**From:** Pam Ward [<mailto:twcmanage@aol.com>]  
**Sent:** Tuesday, September 27, 2011 9:22 AM  
**To:** Johnson, Dennis  
**Cc:** Sherwood, Mark; Gallagher, Michael  
**Subject:** Re: Storm Drain at Village Green Shopping Center

Mr. Johnson:

Have you had a chance to schedule an investigation of the storm Drain at the Village Green Shopping Center? I do have a couple of photos of the drain that is backing up, but they are dry weather photos.

Item # 5

## **Jester, Sandy**

---

**From:** Johnson, Dennis  
**Sent:** Monday, September 19, 2011 3:54 PM  
**To:** 'Pam Ward'  
**Cc:** Sherwood, Mark; Gallagher, Michael  
**Subject:** Storm Drain at Village Green Shopping Center

Ms. Ward,

You are correct; the storm drain pipe running through the Vienna Village Shopping Center property drains the watershed to the north including the townhouses and part of the two schools. The storm drain was in place when the shopping center was built in 1973 and development plans show the pipe being rerouted around your new buildings by your contractor. Immediately after the heavy rain recently both our inspector and a DPW storm drain crew investigated and found the storm sewer open and free flowing.

I'm sorry to hear there is an ongoing problem. We will send the crew back in dry weather to inspect the pipes and manholes for any settlement, obstructions, or other failures. Is there someone familiar with the flooding that can show us the exact locations?

Dennis Johnson



**Dennis Johnson, PE** | Director | Town of Vienna | Public Works Department | 703-255-6386 |  
[djohnson@viennava.gov](mailto:djohnson@viennava.gov)

[www.viennava.gov](http://www.viennava.gov)  
We're on [Facebook!](#)  
Follow us on [Twitter!](#)

---

**From:** Pam Ward [<mailto:twcmanage@aol.com>]  
**Sent:** Monday, September 19, 2011 8:40 AM  
**To:** Johnson, Dennis  
**Subject:** Village Green Shopping Center

Mr. Johnson:

The Village Green Shopping Center is having a problem with the storm drain that is located in the alley behind 513 Maple Avenue West. It drains storm water for a large part of the shopping center and appears to be tied into a drain from the townhouses that are located behind the shopping center. Can you send someone to investigate the problem? The homeowners in the townhouse closet to us are getting flooded as well. This has been an ongoing problem, and several of our stores are getting water through their back doors during heavy rains.

Feel free to contact me if you have any questions. I am the property manager for Village green Shopping Center.

Pam Ward  
TWC Association Management  
12110 Sunset Hills Road #60  
Reston, VA 20190  
703-437-5800 ext.104  
703-471-6578 (fax)

Pam Ward  
TWC Association Management  
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To: Pam Ward <[twcmanage@aol.com](mailto:twcmanage@aol.com)>  
Cc: Sherwood, Mark <[MSherwood@viennava.gov](mailto:MSherwood@viennava.gov)>; Gallagher, Michael <[MGallagher@viennava.gov](mailto:MGallagher@viennava.gov)>  
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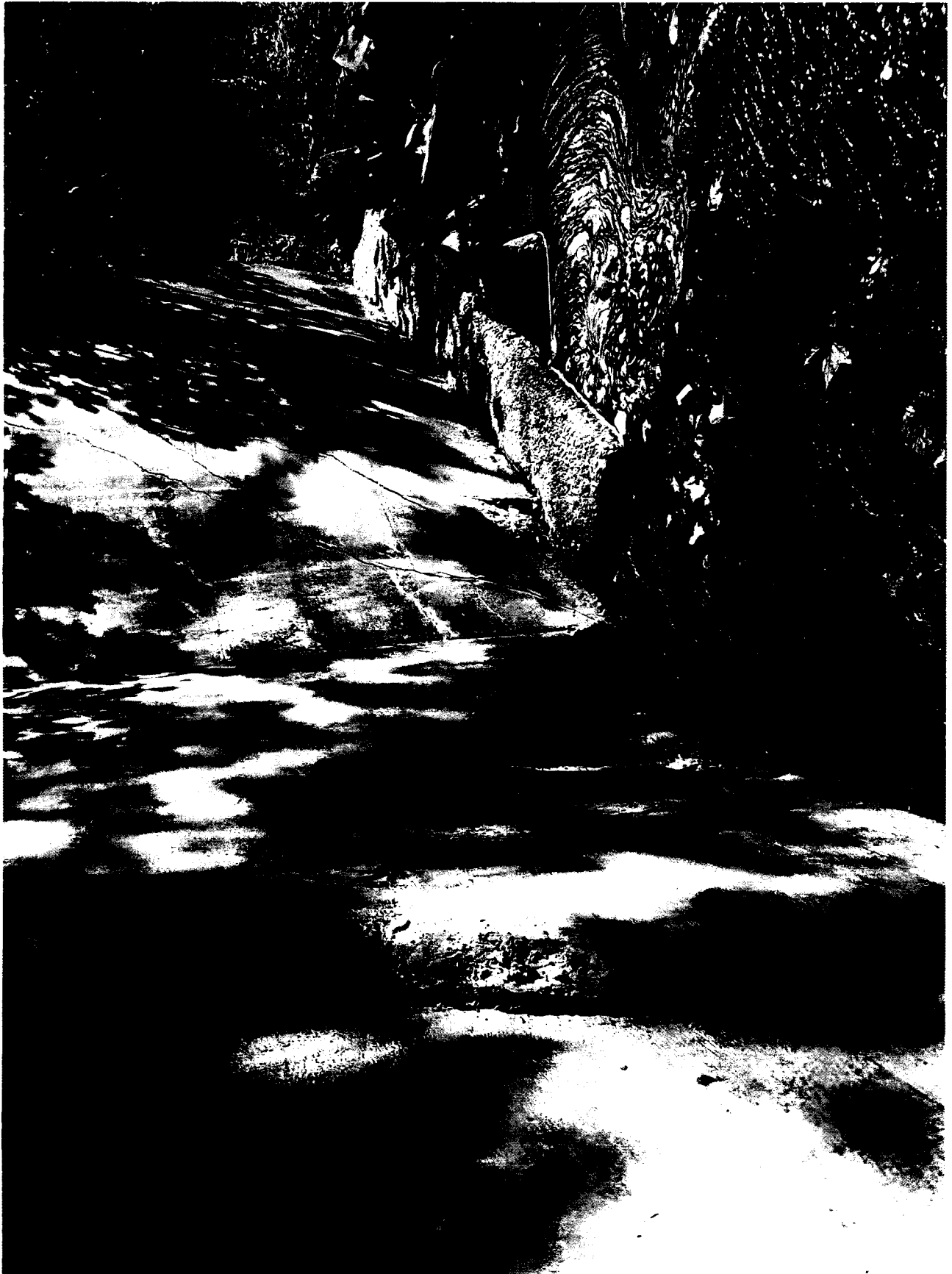
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Pam Ward  
TWC Association Management  
12110 Sunset Hills Road #60  
Reston, VA 20190  
703-437-5800 ext.104  
703-471-6578 (fax)



































Item # 5

## **POLICE DEPARTMENT BUILDING - New Construction or Renovation**

### **Request CIP Funding for:**

#### **Architectural / Engineering services for:**

- Space Needs Assessment
- Site Feasibility Evaluation
- Conceptual Design Study

#### **Current Police Headquarters Building:**

- Completed in 1994
- 9,800 gross square feet and a 24-space police parking lot
- Building was built smaller than originally designed
- No growth potential
- Utilize Bowman House basement, metal storage, and stairways for storage
- Offsite parking arrangement with Faith Baptist Church
- 2006 Bond Issue funding reallocated (records storage building and CIS build out)
- CIS moved to Town Hall occupying 1,800 square feet in February 2007

#### **Deficiencies:**

- No Emergency Operations Center capability
- Inadequate space for Dispatch/Communications Center
- Deficient interview rooms (suspect and witness)
- Inadequate office space
- No evidence processing space
- Deficient Property Room storage
- Deficient Server Room capacity
- Deficient emergency generator capacity
- No community room / training room / large briefing room
- Inadequate / unsuitable storage space

#### **Recommended Path Forward:**

##### **Space Needs Assessment**

- Analyze space and functional requirements.
- Prepare detailed space program
- Developed site and building guidelines

##### **Site Feasibility Evaluation**

- Gather information on the existing site and up to two potential sites for a new facility
- Develop recommendations as to the feasibility and adequacy of each site for the required facilities.

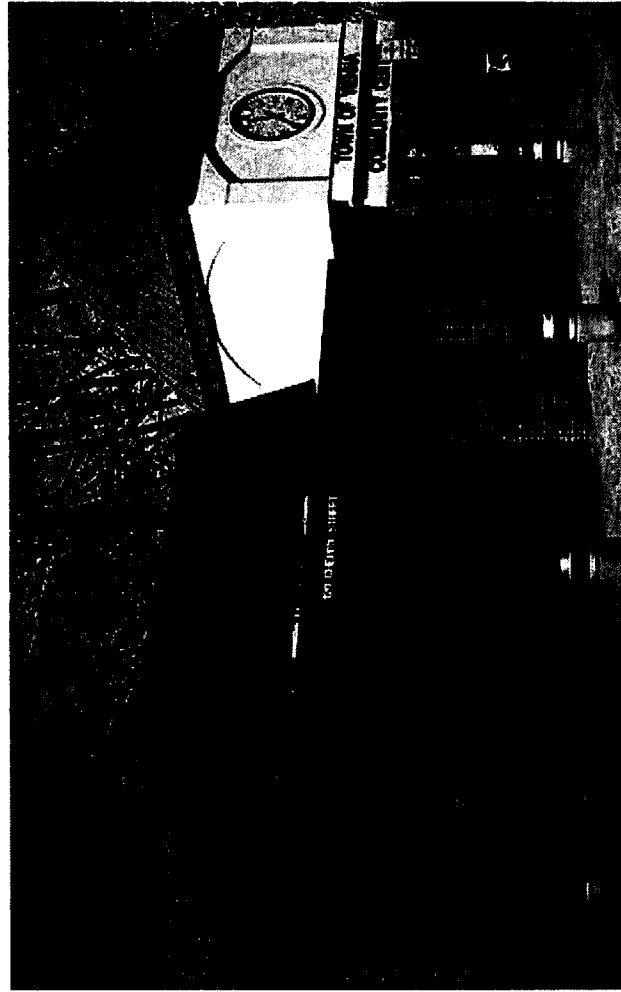
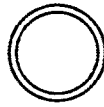
## **POLICE DEPARTMENT BUILDING - New Construction or Renovation**

**Page 2**

### **Conceptual Design Study**

- Develop a total of up to three alternative conceptual design approaches for expansion of the existing police station and/or construction of a new Public Safety Building
- Prepare budget estimates for each concept.

# Vienna Community Center Expansion and Renovation



FEASIBILITY STUDY

PREPARED FOR  
DECEMBER 12, 2011  
WORK SESSION

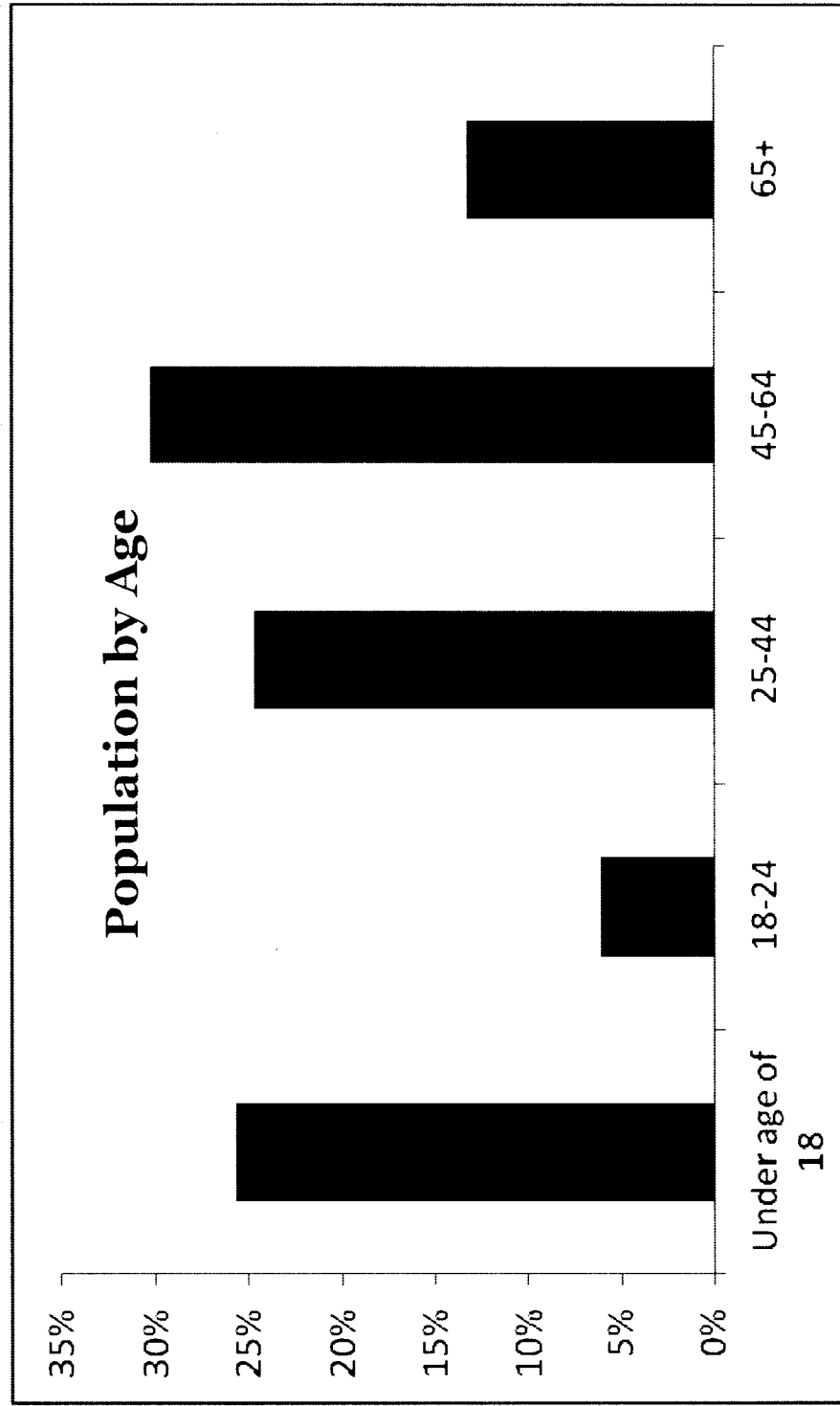
# Our History

3

- Shortly after World War II, the Lions Club began talk about the need for a community center in the Town
- In 1946, the club started setting aside monies, growing funds to \$7,500
- August 1961, two committees were formed to establish by-laws and nominate officers for a community group to look at building a community center
- On January 18, 1962 Vienna Community Center Inc. was open for business
- A building committee was formed to determine the best place to build the center
- Spring 1962, the Town offered to give Town-owned property for the center
- In 1963, several sites were considered and it was decided Cherry Street was a good central location (cut through linking Center Street and Park Street, and adjacent W&OD Trail)
- In January 1963, the Board unanimously approved the architectural plans
- On April 17, 1966 the building was dedicated and several years later transferred to the Town
- The cost of the 4,000 sq. ft. building was \$95,000
- The Community Center has since been renovated three times (1968, 1988, 1998) adding 11,500 sq. ft. for an auditorium at a cost of \$1,030,000 in 1988 and in 1998 ADA issues were addressed at a cost of \$1.4M

# Our Community Now

5



*“Every effort you  
put back into this  
community comes  
back tenfold.”*

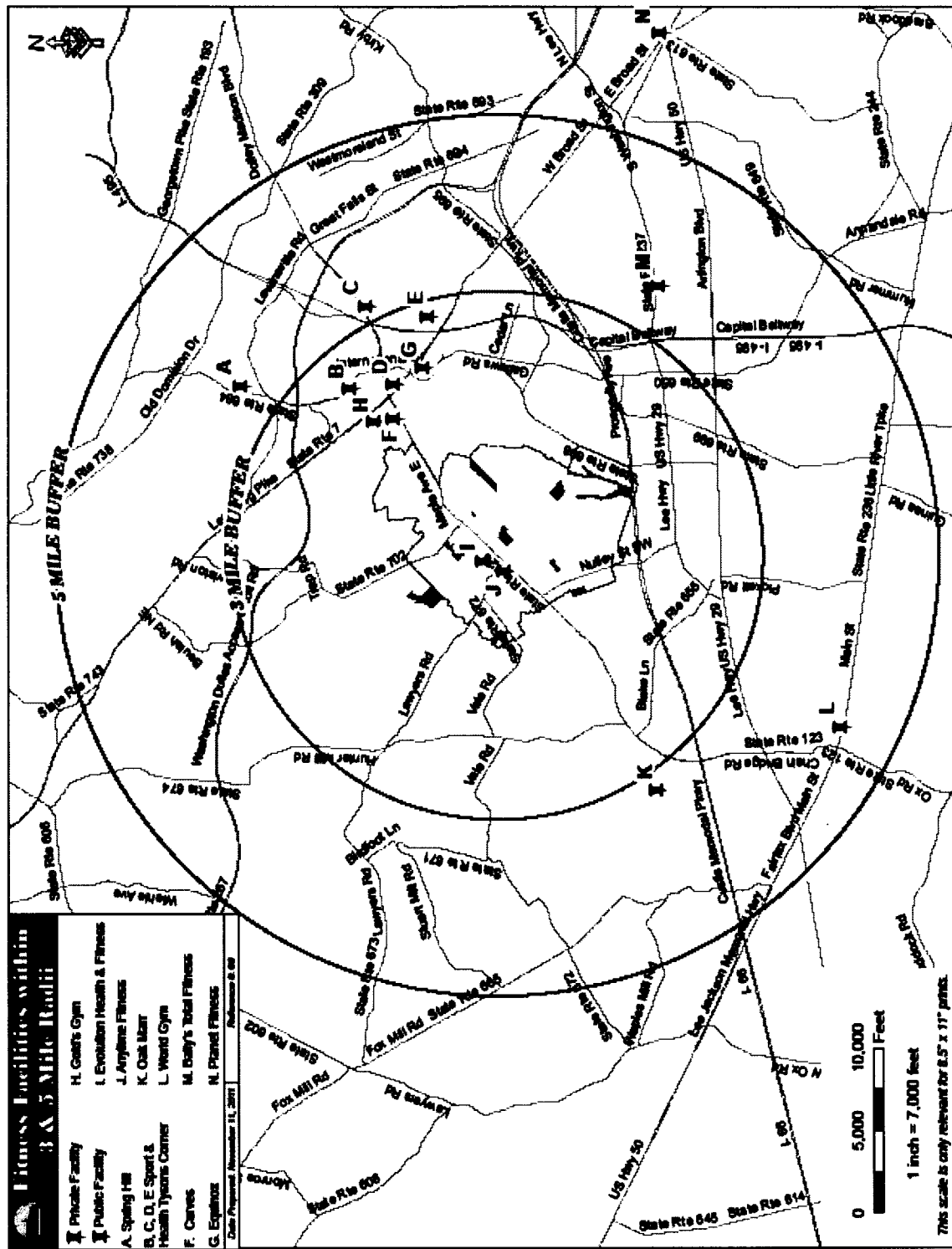
*- Quote by late  
Vienna resident  
Martha Pennino*

## Expectations:

- Quality Town services and facilities including quality of life services programs
- State-of-the-art facilities designed with specific programs in mind
- A facility that is the center of the community for families, kids and seniors



# Public/Private Facilities Within 5 Mile Radius



# What Our Community Wants

11

## ➤ **What we need**

- Convenient facility location in Town
- Pool – leisure, therapy, lap
- Birthday party rooms
- Fitness center
- Full-size gymnasium
- Updated meeting rooms
- Improved parking
- Rooms to have individual HVAC controls
- Updated restrooms
- More kid-friendly common areas
- Improved customer service counter, lobby and waiting areas for parents to watch their children in programs
- Improved lighting throughout the facility
- Improved IT capabilities throughout the facility

# Space Analysis

13

## Hurdles to Overcome

### ➤ Site Issues:

- Current Community Center is 20,000 square foot
- 27,000 square foot addition
- Addition could be located on site
- Addition would include main level of Aquatics Center, Gymnasium, Fitness Center and Customer Service Center
- Exceeds 25% lot coverage, however setback requirements could be met
- Site Plan modification would be required for lot coverage

### ➤ Parking Issues:

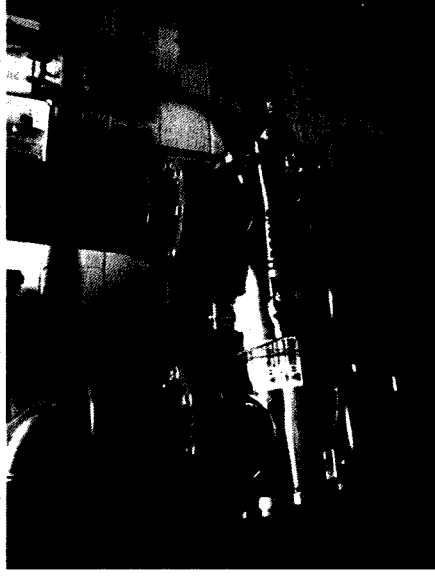
- Currently 180 on-site parking spaces
- Additional 20 on-street parking spaces are available
- Currently 185 parking spaces are required
- Loss of 20 parking spaces with addition
- Based on current Town Code an additional 182-187 parking spaces would be required
- Single Parking Deck on Park Street lot would add additional 120-140 spaces
- Deficit of 47-62 parking spaces

# Components of an Expansion

15

## ➤ Support Space

- Party rooms
  - Wet/Dry rooms
- Locker room space
  - Men's/Women's
  - Separate family/handicap locker room
- Office and Guard space
- Pump room
- Equipment Storage
  - Lane lines
  - Competition equipment
  - Teacher aids

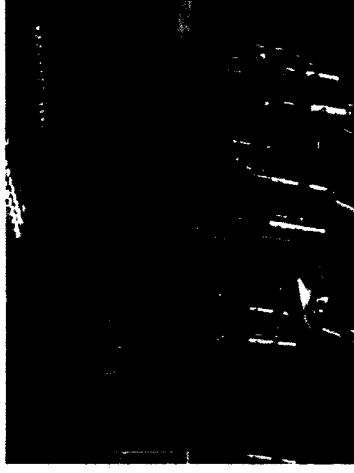


# Components of an Expansion

17

## ➤ **Aerobics Room – 4,000 square feet**

- Room with cabinets and storage
- Ballet bar and mirrors
- Built in sound system
- Multi-functional
  - Spin classes
  - Yoga
  - Aerobics
  - Dance
  - Rentals



# Components of an Expansion

19

## ➤ **Cable TV/Computer Studio**

- Space for productions
- Town meeting space
- Computer classes/study lab

## ➤ **Emergency Shelter Site**

- Equip the facility to meet state and federal requirements as an Emergency Shelter Site
- Work with area hospitals and Red Cross to establish facility as a registered emergency site

# Components of Existing Renovation

21

- **Upstairs Bathrooms**
  - Add one or two more stalls
- **Upstairs Storage**
  - Extend storage area
- **Multi-Purpose Room Mid-Level**
  - Add sink, cabinet wall
  - Remove poles in the middle of room
- **Teen Center**
  - New flooring
  - New counters and bar area
  - New seating
  - Storage
- **Basement HVAC Room/Storage**
  - Increase size and install locking cabinets and work bench

# Assessment, Design and Capital Costs

23

## Facility and Program Assessment with Conceptual Drawings

**\$200,000**

## Design and Build

**\$10,000,000**

## Debt Service (based on \$10,000,000 bond)

<u>Years:</u>	<u>Annual Amount</u>
15	\$838,000
20	\$672,000
25	\$570,000

\*1 cent on the Meals Tax equals \$590,000 annually



# Annual Operational Costs/Revenues

25

## ➤ Current Annual Operational Costs

○ Expenditures	
• Personnel	\$2,110,014
• Operations & Maintenance	\$402,440
• Capital Outlay	\$67,000
<b>Total – Expenditures</b>	<b>\$2,579,454</b>

## ➤ Current Annual Revenue Projections

○ Revenues	
○ Admissions/Memberships	\$0
○ Rentals	\$85,000
○ Programs/Activities	\$705,000
<b>Total – Revenues</b>	<b>\$790,588</b>

# Annual Operational Costs/Revenues

27

## ➤ Year 5 Annual Operational Costs

○ Expenditures		
• Personnel	Aquatics and Fitness *	DPR
• Operations & Maintenance	\$640,320	\$3,087,934
• Capital Outlay	\$290,000	\$756,830
	\$100,000 **	\$160,000
<b>Total – Expenditures</b>	<b>\$1,030,320</b>	<b>\$4,004,764</b>

## ➤ Year 5 Annual Revenue Projections

➤ Revenues		
• Admissions/Memberships	\$754,000	\$754,000
• Rentals	\$87,000	\$198,000
• Programs/Activities	\$348,000	\$1,165,000
<b>Total – Revenues</b>	<b>\$1,537,000</b>	<b>\$2,117,000</b>

## Next Steps

29

- Ask the Community!
- Fund the Facility and Program Assessment
- Explore and Secure Public and Private Partners
- Fund the Design
- Fund the Project
- Enjoy!

**TOWN COUNCIL  
CLOSED SESSION  
AGENDA**

**Monday, December 12, 2011**

**Council will convene into a Closed Session at the conclusion of the Work Session, for discussion and consultation with legal counsel and briefings by staff members or consultants, where such consultation or briefing in open meeting would adversely affect the negotiating or litigating posture of the public body, etc.**

***Certification Motion, December 12, 2011***

“I move that the members of the Vienna Town Council be polled to affirm that during the Closed Session convened this date, December 12, 2011, the Town Council met for purposes of consultation with legal counsel and briefings by staff members or consultants, where such consultation or briefing in open meeting would adversely affect the negotiating or litigating posture of the public body.”

“I further move that the Certification Resolution be adopted in accordance with State Statutes, and that the Deputy Town Clerk is authorized to execute the Certification Resolution.”

“I further move that the Closed Session be continued to December 19, 2011 at 7:15 p.m., in accordance with Virginia Code Section 2.2-3711.A(1), for purposes of discussion of personnel issues, specifically the annual performance review process for the Town Manager, Town Clerk and Town Attorney.”

Closed Session Date: December 12, 2011

Motion: Kelleher

Second: Di Rocco

## CERTIFICATION OF CLOSED SESSION

WHEREAS, the Town Council of Vienna has convened a closed session on this date pursuant to an affirmative recorded vote and in accordance with the provisions of The Virginia Freedom of Information Act; and

WHEREAS, Section 2-233 (A) (1) of the Code of Virginia required a certification by the Town Council that such Closed Session was conducted in conformity with Virginia law;

NOW, THEREFORE, BE IT RESOLVED that the Town Council hereby certifies that to the best of each member's knowledge, ( i ) only public business matters lawfully exempted from open meeting requirements by Virginia law were discussed in the Closed Session to which this certification resolution applies, and ( ii ) only such public business matters as were identified in the motion convening the closed session were heard, discussed, or considered by the Town Council.

**Vote:**                      **Aye   /   Nay**

Laurie Genevro Cole	✓	/
Laurie A. DiRocco	✓	/
Edythe F. Kelleher	✓	/
Michael J. Polychrones	✓	/
Carey J. Sienicki	✓	/
Howard J. Springsteen	✓	/
Mayor M. Jane Seeman	✓	/

Paul S. Waters  
Deputy Town Clerk

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"I move that the members of the Vienna Town Council be polled to affirm that during the Closed Session convened this date, December 12, 2011, the Town Council met for purposes of consultation with legal counsel and briefings by staff members or consultants, where such consultation or briefing in open meeting would adversely affect the negotiating or litigating posture of the public body."

"I further move that the Certification Resolution be adopted in accordance with State Statutes, and that the Deputy Town Clerk is authorized to execute the Certification Resolution."

"I further move that the Closed Session be continued to December 19, 2011 <sup>7:15pm</sup> ~~at the conclusion of the Regular Council meeting~~, in accordance with Virginia Code Section 2.2-3711.A(1), for purposes of ~~consultation with legal counsel and briefings by staff members or consultants, where such consultation or briefing in open meeting would adversely affect the negotiating or litigating posture of the public body.~~"

discussion of personnel issues, specifically the annual performance review process for the Town Manager, Town Clerk and Town Attorney.

Carol → For next week, motion needed to continue closed session to end of the meeting for ~~discussing~~ legal briefing, etc.



Charles A. Robinson, Jr., Mayor

July 2, 1991

Mrs. Marjorie Kipps  
615 Tapawingo Road, S.W.  
Vienna, Virginia 22180

Dear Mrs. Kipps:

This is in response to your recent letter urging the return to spring and fall cleanups.

The Town Council has spent many hours wrestling with the question of how to improve special pickup service. As a matter of fact, budget constraints for the year beginning July 1, 1991 almost resulted in either total elimination of the program or charges for the service sufficient to place it on a self sustaining basis. I happen to believe the program is a very desirable one, and that the Town should continue to provide it on a tax supported basis.

The present system of two free pickups per year was instituted after we received a torrent of complaints about the appearance of the community in the spring and fall when the entire town was blanketed with debris. As you state, the present system is not working as well as we had hoped for several reasons, but mostly because people seem to leave debris and discarded items at the curb for several days or weeks before calling for the pickup. During this interim period the pile seems to grow as more material is added. We do our best to complete the pickup promptly, and in some cases we even pick up materials before the request is received, frequently on the complaint of neighbors.

Your cost analysis is correct. As a matter of fact, I believe that returning to the twice a year pickup would involve an additional cost which would be very difficult to justify under the present economic conditions. We are postponing the acquisition of police cruisers and other equipment and leaving staff positions



July 2, 1991

unfilled as retirements and resignations occur. In addition, regretfully, we are unable to offer our employees a cost of living increase this year.

In summary, please be assured that the Town Council is well aware of the problem you cite, and will continue to evaluate alternative solutions.

Sincerely,

A handwritten signature in cursive script that reads "Charlie Robinson".

Charles A. Robinson, Jr.  
Mayor

CAR:dk

cc: Town Council  
Town Manager